

BOARD OF APPEALS, CITY & COUNTY OF SAN FRANCISCO

Appeal of
SFCOV, _____)
Appellant(s))
vs.)
DEPARTMENT OF BUILDING INSPECTION, _____)
PLANNING DEPARTMENT APPROVAL Respondent

Appeal No. **22-071**

NOTICE OF APPEAL

NOTICE IS HEREBY GIVEN THAT on October 13, 2022, the above named appellant(s) filed an appeal with the Board of Appeals of the City and County of San Francisco from the decision or order of the above named department(s), commission, or officer.

The substance or effect of the decision or order appealed from is the ISSUANCE on September 28, 2022 to Verizon, of an Alteration Permit (remove nine antennas and add 12 antennas; remove 12 radio units and add nine radio units; install mount modifications for antennas) at 1431 San Bruno Avenue.

APPLICATION NO. 2022/02/28/8869

FOR HEARING ON November 30, 2022

Address of Appellant(s):

Address of Other Parties:

SFCOV, Appellant(s)
c/o Chris Lee, Agent for Appellant(s)
PO BOX 883392
San Francisco, CA 94188

Verizon, Permit Holder(s)
c/o Melanie Sengupta Attorney for Permit Holder(s)
Mackenzie & Albritton, LLP
155 Sansome Street, Suite 800
San Francisco, CA 94104



Date Filed: October 13, 2022

**CITY & COUNTY OF SAN FRANCISCO
BOARD OF APPEALS**

PRELIMINARY STATEMENT FOR APPEAL NO. 22-071

I / We, **SFCOV**, hereby appeal the following departmental action: **ISSUANCE of Alteration Permit No. 2022/02/28/8869** by the **Department of Building Inspection** which was issued or became effective on: **September 28, 2022**, to: **Verizon**, for the property located at: **1431 San Bruno Avenue**.

BRIEFING SCHEDULE:

The Appellant may, but is not required to, submit a one page (double-spaced) supplementary statement with this Preliminary Statement of Appeal. No exhibits or other submissions are allowed at this time.

Appellant's Brief is due on or before: 4:30 p.m. on **November 10, 2022, (no later than three Thursdays prior to the hearing date)**. The brief may be up to 12 pages in length with unlimited exhibits. It shall be double-spaced with a minimum 12-point font. An electronic copy shall be emailed to: boardofappeals@sfgov.org, julie.rosenberg@sfgov.org, tina.tam@sfgov.org, corey.teague@sfgov.org and rganapa@salientglobaltech.com.

Respondent's and Other Parties' Briefs are due on or before: 4:30 p.m. on **Tuesday, November 22, 2022, (note this is two days earlier than the Board's regular briefing schedule due to the Thanksgiving holiday)**. The brief may be up to 12 pages in length with unlimited exhibits. It shall be double-spaced with a minimum 12-point font. An electronic copy shall be emailed to: boardofappeals@sfgov.org, julie.rosenberg@sfgov.org, tina.tam@sfgov.org, corey.teague@sfgov.org and neighbor@sfcov.org.

Hard copies of the briefs do NOT need to be submitted to the Board Office or to the other parties.

Hearing Date: **Wednesday, November 30, 2022, 5:00 p.m., Room 416 San Francisco City Hall, 1 Dr. Carlton B. Goodlett Place**. The parties may also attend remotely via Zoom. Information for access to the hearing will be provided before the hearing date.

All parties to this appeal must adhere to the briefing schedule above, however if the hearing date is changed, the briefing schedule MAY also be changed. Written notice will be provided of any changes to the briefing schedule.

In order to have their documents sent to the Board members prior to hearing, **members of the public** should email all documents of support/opposition no later than Tuesday, November 22, 2022 by 4:30 p.m. to boardofappeals@sfgov.org. Please note that names and contact information included in submittals from members of the public will become part of the public record. Submittals from members of the public may be made anonymously.

Please note that in addition to the parties' briefs, any materials that the Board receives relevant to this appeal, including letters of support/opposition from members of the public, are distributed to Board members prior to hearing. All such materials are available for inspection on the Board's website at www.sfgov.org/boa. You may also request a hard copy of the hearing materials that are provided to Board members at a cost of 10 cents per page, per S.F. Admin. Code Ch. 67.28.

The reasons for this appeal are as follows:

See attachment to the preliminary Statement of Appeal.

Appellant:

Signature: Via Email

Print Name: Chris Lee, agent for appellant

Preliminary Statement for appeal of Permit application 202202288869 – 1431 San Bruno Ave

Permit application 202202288869 is granting the unwelcomed expansion of a wireless transmission tower directly adjacent to residential property.

San Francisco requires wireless transmission sites to minimize the visual impact they have on their surroundings; this site fails to comply with the requirement as both the tower and ground support equipment are directly visible from the adjacent home as well as from the street.

This permit should not have been issued as planning code enforcement 2022-006441ENF is currently active for this parcel for these very issues.

Planning code requires wireless transmission sites to maintain a community liaison on file with the planning department to resolve issues such as these, there is no liaison for this site.

A block book notice is on file for this parcel, however we did not receive the required notification of this permit or planning approval.

Since the planning code enforcement action was ignored and there is no community liaison, we are forced to file this appeal to request this permit be revoked.

APPROVED
Dept. of Building Insp.
San Francisco
SEP 28 2022
SFFD INSP. FEES REQ.

FIRE

APPROVED FOR INSURANCE

Bldg. 3/8
FORM

2022-02-28 886
APPLICATION NUMBER

(SPECIAL APPROVAL REQUIRED)
APPROVAL NUMBER

201842576 BBD
DIRECTOR OF BUILDING INSPECTION

APPLICATION FOR BUILDING PERMIT ADDITIONS, ALTERATIONS OR REPAIRS

CITY AND COUNTY OF SAN FRANCISCO DEPARTMENT OF BUILDING INSPECTION

APPLICATION IS HEREBY MADE TO THE DEPARTMENT OF BUILDING INSPECTION OF SAN FRANCISCO FOR PERMISSION TO BUILD IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS SUBMITTED HERewith AND ACCORDING TO THE DESCRIPTION AND FOR THE PURPOSE HEREINAFTER SET FORTH.

FORM 3 OTHER AGENCIES REVIEW REQUIRED

FORM 8 OVER-THE-COUNTER ISSUANCE

NUMBER OF PLAN SETS

DO NOT WRITE ABOVE THIS LINE

DATE FILED 2/28/22	PLANS PER RECEIPT NO. 22004289	71) STREET ADDRESS OF JOB 1431 SAN BRUNO AVE (315476)	BOOK/LOT 4279/029
PERMIT NO. 22004289	ISSUED SEP 28 2022	2) ESTIMATED COST OF JOB 33,500	3) JOB RELATED COST \$33,500 N.P.A. 1/25/22

INFORMATION TO BE FURNISHED BY ALL APPLICANTS

LEGAL DESCRIPTION OF EXISTING BUILDING					
(A) TYPE OF CONSTRUCTION R5	(B) NO. OF STORIES OF OCCUPANCY 1	(C) NO. OF FLOORS AND CELLARS TELECOM	(D) PRESENT USE TELECOM	(E) OCCUPY CLASS B	(F) NO. OF DWELLING UNITS
DESCRIPTION OF BUILDING AFTER PROPOSED ALTERATION					
(A) TYPE OF CONSTRUCTION R5	(B) NO. OF STORIES OF OCCUPANCY 1	(C) NO. OF FLOORS AND CELLARS TELECOM	(D) PROPOSED USE (LEGAL USE) TELECOM	(E) OCCUPY CLASS B	(F) NO. OF DWELLING UNITS
(1) IS ADDITION TO BE CONSTRUCTED OR ALTERED?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	(1) WILL STREET SPACE BE USED OR CURB CUTS IN STREET?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	(2) ELECTRICAL WORK TO BE PERFORMED?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
(3) IS PLUMBING WORK TO BE PERFORMED?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	(4) IS MECHANICAL WORK TO BE PERFORMED?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	(5) IS PAINTING WORK TO BE PERFORMED?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
(3A) GENERAL CONTRACTOR	NAME FEDERAL	ADDRESS 510 Garcia Ave	CITY SFO	PHONE 975 789-1144	EXPIRATION DATE 11/30/2023
(3B) OWNER (LESSOR)	NAME CROWN CASTLE	ADDRESS (Verizon)	CITY SFO	PHONE FOR CONTACT BY DEPT. (415) 529-0868	
(4) WRITE IN DESCRIPTION OF ALL WORK TO BE PERFORMED UNDER THIS APPLICATION (IF REFERENCE TO PLANS IS NOT SUFFICIENT)					

REMOVE (9) Antenna, ADD (12) Antennas
REMOVE (12) RADIO UNITS, ADD (9) RADIO UNITS
INSTALL MOUNT MODIFICATIONS FOR Antennas.

ADDITIONAL INFORMATION

(1) DOES THIS ALTERATION CREATE ADDITIONAL HEIGHT OR STORY TO BUILDING?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	(2) IS (1) TO BE VED, STATE NEW HEIGHT OR CHANGE LINE OF FRONT?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	(3) DOES THIS ALTERATION CHANGE EXIST OR HEIGHT, EXTENSIONS TO BUILDING?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	(4) IS THIS IN YES, STATE NEW GROUND FLOOR AREA	SQ. FT.
(5) WILL SIGNAGE OR OTHER SUB-ORDINATE SPACE BE REPAIRED OR ALTERED?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	(6) WILL SIGNAGE BE EXTENDED BEYOND PROPERTY LINE?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	(7) DOES ANY OTHER EXISTING BLDG. ADJACENT TO THIS BLDG. HAVE A SIGN ON PLAT PLAN?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	(8) DOES THIS ALTERATION CORRECT TO A CHANGE OF OCCUPANCY?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
(9) ARCHITECT OR ENGINEER (DESIGN) <input type="checkbox"/> CONSTRUCTION <input checked="" type="checkbox"/>			ADDRESS Fullerton Eng 100 E Woodhold Rd. Site 500		CITY/CERTIFICATE NO. Schmabury IL		
(10) CONSTRUCTION LEADER (REPAIR REPAIR AND REPAIR CONSTRUCTION) IN ANY OF THESE IS NO NEW CONSTRUCTION LEADER, ENTER "NONE"			ADDRESS (415) 596-6335				

IMPORTANT NOTICES

The change that is made in the character of the occupancy or use without first obtaining a building permit involving such change. See San Francisco Building Code and San Francisco Housing Code.
The portion of building or structure or an existing use that is not to be altered is to be shown on "R" by any one existing from the 1921 act. See Sec. 206, California Penal Code.
Permitted to Use Provisions Building Code. The building permit will be granted for the job. The permit is issued upon payment of permit fees and application fees. See San Francisco Building Code.
Permit fees are shown on drawings accompanying this application are intended to be correct. If actual grade fees are not the same as shown, reduced & multiple drawings correct grade fees, only E&S, not complete E&S of existing work and not reduced must be submitted to the Department for approval.
ANY ALTERATION REQUIRED AFTER BY CODE MAY BE APPLIED.

NOTICE TO APPLICANT

FIELD HANDLER CLASS: The permittee [by acceptance of the permit,] is to identify and hold liable the City and County of San Francisco from and against any and all claims, demands and losses for damages resulting from operations under this permit, regardless of negligence of the City and County of San Francisco, and to secure the release of the City and County of San Francisco from all such claims, demands or losses.
In conformity with the provisions of the Labor Code of the Labor Code of the State of California, the applicant shall have worker's compensation coverage under (1) or (2) and shall include the 10% fee, or, in alternative to applicable, the amount of the fee (2) in check for which the permit is issued. Mark the appropriate method of compliance below:
I hereby affirm under penalty of perjury that the following description:

- I have and will maintain a certificate of payment in full from the worker's compensation fund, as provided by the City and County of San Francisco. For the performance of the work for which the permit is issued.
- I have and will maintain a worker's compensation insurance, as required by the Labor Code of the Labor Code of the State of California, and shall include the 10% fee, or, in alternative to applicable, the amount of the fee (2) in check for which the permit is issued. Mark the appropriate method of compliance below:
Cash
Policy Number
- The removal of the work to be done is \$1000 or less.
- I certify that in the performance of the work for which this permit is issued I shall not employ any person in any manner that is in violation of the worker's compensation laws of California. I further acknowledge that I understand that in the event that I should become a part of the worker's compensation program of the Labor Code of California, I shall be liable to comply therewith with the provisions of Section 3200 of the Labor Code, that the permit herein applied for shall be deemed voided.
- I certify as the owner in the agent for the owner that in the performance of the work for which this permit is issued, I will employ a contractor who complies with the worker's compensation laws of California, and who, upon the commencement of any work, will file a completed copy of this form with the Construction Division.

APPLICANT'S CERTIFICATION

I HEREBY CERTIFY AND AGREE THAT IF A PERMIT IS ISSUED FOR THE CONSTRUCTION DESCRIBED IN THIS APPLICATION, ALL THE PROVISIONS OF THE PERMIT AND ALL LAWS AND ORDINANCES THEREIN WILL BE COMPLIED WITH.

Signature of Applicant or Agent

2/28/22

Permit Details Report

Report Date: 10/13/2022 4:03:58 PM

Application Number: 202202288869
 Form Number: 8

Address(es): 4279 / 029 / 0 1431 SAN BRUNO AV

Description: VERIZON: REMOVE 9 ANTENNA, ADD 12 ANTENNAS. REMOVE 12 RADIO UNITS, ADD 9 RADIO UNITS. INSTALL MOUNT MODIFICATIONS FOR ANTENNAS.

Cost: \$33,500.00
 Occupancy Code: B
 Building Use: 82 - ANTENNA

Disposition / Stage:

Action Date	Stage	Comments
2/28/2022	TRIAGE	
2/28/2022	FILING	
2/28/2022	FILED	
9/28/2022	APPROVED	
9/28/2022	ISSUED	

Contact Details:

Contractor Details:

License Number: 1058024
 Name: RAVIKANTH GANAPAVARAPU
 Company Name: RAVIG INC DBA SALIENT GLOBAL TECHNOLOGI
 Address: 510 GARCIA AV * PITTSBURG CA 94565-0000
 Phone:

Addenda Details:

Description:

Step	Station	Arrive	Start	In Hold	Out Hold	Finish	Checked By	Hold Description
1	BID-INSP	2/28/22	2/28/22			2/28/22	SAUNDERS PHILIP	
2	INTAKE	2/28/22	2/28/22			2/28/22	SHAWL HAREGGEWAIN	
3	CP-ZOC	3/31/22	3/31/22			3/31/22	OROPEZA EDGAR	Approved site mod - existing macro site tower approved for said work - REMOVE 9 ANTENNA, ADD 12 ANTENNAS. REMOVE 12 RADIO UNITS, ADD 9 RADIO UNITS. INSTALL MOUNT MODIFICATIONS FOR ANTENNAS.
4	PAD-STR	5/25/22	5/25/22			5/25/22	RALLS MATTHEW	otc approved 5/25/22. Recinded approval per Planning or Health comments email from Stephanie - 8/15/22.
5	BLDG	9/28/22	9/28/22			9/28/22	JONES DAVID	+90 DAYS RECHECK
6	MECH	6/13/22	6/13/22			8/22/22	ORTEGA REYNALDO	re-approved OTC, plans back to customer for HEALTH review Approved OTC, plans back to customer for SFFD review
7	MECH-E	9/28/22	9/28/22			9/28/22	JACOBO MARCO	2022-09-28 - marco.jacobo@sfgov.org: Acceptance issued OTC for Electrical Title 24 only. The Electrical Engineer of Record shall ensure full coordination with other disciplines. All electrical work shall be subject to verification and final acceptance by SFDDBI Electrical Inspection Division, and shall comply with the 2019 San Francisco Electrica Code and 2019 California Energy Code. Plans returned to customer.
8	SFFD	8/2/22	8/2/22			8/2/22	ZIEGLER ERIK	8/2/22 Approved OTC by Ziegler of SFFD. Plans returned to applicant.
9	INTAKE	8/22/22	8/22/22			8/22/22	BUFKA SUSAN	ADDED 3 SHEETS FOR EMF STUDY
10	HEALTH	8/22/22	8/22/22			8/22/22	DUQUE ARTHUR - DPH	Approved OTC.
11	CPB	9/28/22	9/28/22			9/28/22	SONG SUSIE	90-DAY BY DJ

This permit has been issued. For information pertaining to this permit, please call 628-652-3450.

Appointments:

Appointment Date	Appointment AM/PM	Appointment Code	Appointment Type	Description	Time Slots
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Inspections:

Activity Date	Inspector	Inspection Description	Inspection Status
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Special Inspections:

Addenda No.	Completed Date	Inspected By	Inspection Code	Description	Remarks
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For information, or to schedule an inspection, call 628-652-3400 between 8:30 am and 3:00 pm.

Station Code Descriptions and Phone Numbers

[Online Permit and Complaint Tracking](#) home page.

Technical Support for Online Services

If you need help or have a question about this service, please visit our FAQ area.

Contact SFGov Accessibility Policies
City and County of San Francisco © 2022

BRIEF SUBMITTED BY THE APPELLANT(S)

APPEAL NO. 22-071 – Wireless Transmission Site at 1431/1435 San Bruno Ave.

Permit application 202202288869 seeks to add (3) additional antennas to the wireless tower on the residential 1400 block of San Bruno Ave.

The existing wireless transmission site is in violation of its conditional use authorization.

The parcels where it is located currently has planning violations, public works violations, and was the subject of a recent DBI director's hearing.

The parcel owner and the wireless tower lease holder have a history of neglecting their property and blighting our neighborhood.

We request permit 202202288869 be approved only under the conditions that all violations are corrected first, and the permit application is altered to comply with San Francisco's planning code and wireless tower sighting guidelines.

History: 1997 97.043C conditional use granted installation of "Four antennas and the base transceiver station" for Parcel 4279-28 and 4279-29, 1431 and 1435 San Bruno Ave.

Application 97.043C initially requested *eight* antennas at this site and was denied by the planning commission until both antenna quantity and height were reduced. (*Exhibit 01*)

Planning 2015-006523PRL granted the addition of "one panel antenna to existing monopole"

1. Four antennas in 1997 with an additional antenna approved in 2015 is a total of (5) antennas. There are no other planning department approvals for expansion of conditional use at this site.

There are in excess of 9 antennas currently at 1431 San Bruno and an additional 4 antennas attached to the billboards at 1435 San Bruno.

(13) existing antennas at a site with planning approval for (5) is a violation of the conditional use authorization and the NSR attached to these parcels.

In addition, *San Francisco WTS guidelines LU2* states “Insure that the type of WTS facility is compatible with the scale of the locale.” This is a residential neighborhood; these parcels are directly opposite Potrero del Sol Park and are the only commercial parcels on this block. This block is more residential now than it was in 1997 when planning limited the site to (4) antennas, and yet somehow, they have illegally increased to 13 and still want to add 3 more antennas now, with 12 more antennas being proposed. (*Exhibit 02*)

2. CUA 97.043C conditions of approval and San Francisco planning code requires WTS sites to have on file with the planning department “a community liaison officer to resolve issues of concern to neighbors and residents”

Sunshine request with San Francisco Planning department shows no community liaison for this wireless facility – response received by Chan Son, CPC, on September 19,2022. There is no method for residents to resolve problems with this facility as required by the planning code. If

a neighborhood liaison was in place as required, this situation could have been mitigated without this appeal.

3. FCC regulations regarding human exposure to RF emissions requires screening and signage, this location is in violation of those requirements per the compliance report dated May 2021. No corrective action has been taken. *(Exhibit 03)*

While San Francisco does not have legal authority over the RF emissions of the site, we would like the commissioners to be aware that the tower is currently at 100% of the FCC human exposure limit at the adjacent homes and public sidewalk *(Exhibit 04)*. The tower is located on the property line of a residential home, from a health and quality of life viewpoint, commissioners, would you want to live there?

4. Conditional use 97.043C requires “Antennas and back-up equipment shall be painted, fenced, landscaped or otherwise treated architecturally so as to minimize visual impacts.” San Francisco Wireless guidelines UD1 echoes that requirement, “Protect the urban design, scale, architectural character and visual continuity of the neighborhood by siting WTS facilities on buildings and in such a way that would minimize visual obtrusion and protect the vistas and beauty of San Francisco.” The WTS guidelines specifically state WTS sites must “ 1. Minimize the visual impact of the

installation from public vistas or streets. 2. Minimize visual impacts of the facility from habitable living areas (such as bedrooms or living rooms) of residential units which directly face the antenna within 100 feet horizontal distance.”

The existing WTS tower is out of character for this residential block. *(Exhibit 05)*

The Antennas dwarf the adjacent home, and the tower is directly visible from the habitable space of the adjacent home. No effort has been made to make the antenna structure blend into the environment as required.

No effort has been made to minimize the visual impact of the antenna structure from the street or sidewalk as required. No effort has been made to minimize the visual impact of the generator or ground equipment from the street or sidewalk as required.

The site is always covered in graffiti as documented by SF311 requests. *(Exhibit 06)*

The site is currently subject to planning enforcement 2022-006441ENF for these violations.

Planning approval for this permit was rescinded on 8/15/22, and yet somehow that was ignored, and planning approval back dated to 5/25/22. This poses the question does the lease holder have “special friends” at building inspection to help them bypass the regulations?

5. Planning code 303s1 protects neighborhood changes in character over time by requiring conditional use for WTS sites to be renewed every 10 years. The conditional use for this site has never been renewed. This area is more residential than it was when the CUA was originally granted in 1997.

6. These parcels have an ongoing history of blight and neglect by the property owner.

Parcels have (2) illegal billboards that are in violation of the Highway Beautification Act of 1965 and have never been removed and are always covered in graffiti. *(Exhibit 07)*

From 2015-2022 lot was used as an illegal chop-shop and junkyard until years of complaints from neighbors resulted in action by SFPD, DPH, DPW, and SF planning to force abatement. 2015-015924ENF, 2020-006495ENF. The lot is still un-maintained and full of garbage.

Property owner is now renting the lot for illegal live events and is again facing planning enforcement actions. 2022-006437ENF

Parcels are ignored by owner and are always covered in graffiti and are subject of both DPW and DBI enforcement actions for blight and graffiti.

Parcels are subject of sidewalk corrective notices by DPW and have not been abated.

All parcels are owned by “Thai Group LLC”, ultimately the property owner must abate all parcel violations before the lease holder is allowed any new permits on this parcel.

We live here, with the current antenna site, we have full signal strength and full 5G bandwidth, even during large events at the adjacent park. Expansion of the antennas at this site is not necessary and provides no benefit to the neighborhood, it only provides increased income to the lease holder who rents antenna capacity.

Before expansion is even considered the site must correct its existing violations and comply with the planning code:

- Supply neighborhood liaison for site to comply with planning regulations.
- Apply to re-new conditional use for WTS at this location to comply with planning regulations.
- Completely surround the antenna base and support equipment with trees and landscaping to hide its view from the street and residential property to comply with planning regulations.
- Implement a design to camouflage the tower with tree like appearance to blend the structure into the residential landscape to comply with the planning code, as has been implemented in many California cities. While not perfect, it goes a long way to hide the currently very visible cabling and minimize the visual disturbance to the neighborhood.

- Abate all graffiti on parcel.
- Abate sidewalk violations on parcels.
- Abate all trash and fire hazards on parcels.
- Cease illegal use of parcels.

The lease holder and the property owner receive significant income from this WTS and all the neighborhood receives in return is blight. Blight creates more blight. Earlier this year four homes on this block were riddled with bullet holes. The blight of this parcel attracts those who see it as a safe area to commit crimes. We maintain our homes and abide by the planning code, we are just asking this property holder and the lease holder to do the same, it should not take an appeal hearing to force them to.

PLANNING COMMISSION
Case Report for Hearing on March 6, 1997

Case No. 97.043C
1435 San Bruno Avenue

DEPARTMENT CONTACT
Kelly Pepper, (415) 558-6233

14328

REVIEWED BY
Robert Passmore

APPLICANT AND FILING DATE

Ernst & Young, agent for Sprint Spectrum, Applicant for the property owned by Edwin Stevens, filed January 17, 1997.

PROPERTY DESCRIPTION

1435 San Bruno Avenue, east side between Cesar Chavez and 25th Streets, Lots 28 and 29 in Assessor's Block 4279.

Present Use

The project site contains Apex Sheet Metal.

Surrounding Development

Single- and multiple-family residences are to the north of the project site on 25th Street and along San Bruno Avenue. Buena Vista School and Knudsen Bloom Park are to the west across San Bruno Avenue, and the Bayshore Freeway is behind the project site to the east.

Proposal

Request for Conditional Use authorization under Section 227(i) of the Planning Code to install a total of four antennas on an existing pole and a base transceiver station in an adjacent proposed fenced area as part of a wireless transmission network in an M-1 (Light Industrial) District and a 40-X Height and Bulk District.

This proposal has been modified by the Applicant since it was originally submitted to the Planning Commission on February 6, 1997. The original case report and draft motion for disapproval should be disregarded. The Applicant has reduced the number of proposed antennas, lowered the antennas, and modified the mounting of the antennas in an effort to minimize the aesthetic impact on the surrounding areas.

The antennas and base transceiver station are part of a wireless transmission network operated by Sprint Spectrum. The existing GTE Mobilnet pole is approximately 55 feet in height. The existing wood pole would be replaced by a galvanized steel pole of equal height. The proposed antennas would be mounted below the existing GTE antennas. Each proposed antenna measures approximately five feet high by eight inches wide, and the tops of the antennas would be approximately 47 feet above sidewalk grade. The base transceiver station, which requires an area approximately 15 feet wide by 12 feet deep, would be located adjacent to the pole in a proposed fenced area.

COMMUNITY OUTREACH

The Applicant mailed notice of a community meeting to all property owners, residents, and neighborhood organizations within a 300-foot radius of the project site. The meeting was held on February 11, 1997 at the Buena Vista School, which is less than two blocks from the project site. No one attended the meeting. The Planning Department and Sprint Spectrum have received one



Exhibit 02:
1431 San Bruno
Antennas

The following antenna inventory was provided by the customer and was utilized to create the site model diagrams:

Ant ID	Operator	Antenna Make and Model	Ant Type	TX Freq (MHz)	Technology	Az (Deg)	Horizontal Beamwidth (Deg)	Ant Length (ft)	Ant Gain (dBd)	Power	Power Type	Power Units	TX Count	Misc Loss	Total ERP (Watts)	Z (ft) (AGL)	MDT (Deg)	EDT (Deg)
1	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	751	LTE	10	66.0	6	11.46	80.00	TPO	Watt	1	0.00	1119.7	53	0	0
1	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	850	LTE	10	64.0	6	12.76	80.00	TPO	Watt	1	0.00	1510.4	53	0	0
1	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	1900	LTE	10	60.0	6	15.06	160.00	TPO	Watt	1	0.00	5130	53	0	0
2	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	751	LTE	10	66.0	6	11.46	80.00	TPO	Watt	1	0.00	1119.7	53	0	0
2	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	850	LTE	10	64.0	6	12.76	80.00	TPO	Watt	1	0.00	1510.4	53	0	0
2	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	2100	LTE	10	62.0	6	14.76	160.00	TPO	Watt	1	0.00	4787.6	53	0	0
3	VERIZON WIRELESS (Proposed)	Ericsson 4408	Panel	3550	LTE/CBRS	10	65.0	0.7	9.41	20.00	TPO	Watt	1	0.00	174.6	52	0	0
4	VERIZON WIRELESS (Proposed)	Ericsson AIR6449	Panel	3700	5G	30	12.0	2.8	23.55	320.00	TPO	Watt	1	0.00	72468.6	55	0	0
5	VERIZON WIRELESS (Proposed)	Ericsson AIR6449	Panel	3700	5G	150	12.0	2.8	23.55	320.00	TPO	Watt	1	0.00	72468.6	55	0	0
6	VERIZON WIRELESS (Proposed)	Ericsson 4408	Panel	3550	LTE/CBRS	180	65.0	0.7	9.41	20.00	TPO	Watt	1	0.00	174.6	52	0	0
7	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	751	LTE	180	66.0	6	11.46	80.00	TPO	Watt	1	0.00	1119.7	53	0	0
7	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	850	LTE	180	64.0	6	12.76	80.00	TPO	Watt	1	0.00	1510.4	53	0	0
7	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	1900	LTE	180	60.0	6	15.06	160.00	TPO	Watt	1	0.00	5130	53	0	0
8	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	751	LTE	180	66.0	6	11.46	80.00	TPO	Watt	1	0.00	1119.7	53	0	0
8	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	850	LTE	180	64.0	6	12.76	80.00	TPO	Watt	1	0.00	1510.4	53	0	0
8	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	2100	LTE	180	62.0	6	14.76	160.00	TPO	Watt	1	0.00	4787.6	53	0	0
9	VERIZON WIRELESS (Proposed)	Ericsson AIR6449	Panel	3700	5G	270	12.0	2.8	23.55	320.00	TPO	Watt	1	0.00	72468.6	55	0	0
10	VERIZON WIRELESS (Proposed)	Ericsson 4408	Panel	3550	LTE/CBRS	280	65.0	0.7	9.41	20.00	TPO	Watt	1	0.00	174.6	52	0	0



Exhibit 02:
1431 San Bruno Antennas

Ant ID	Operator	Antenna Make and Model	Ant Type	TX Freq (MHz)	Technology	Az (Deg)	Horizontal Beamwidth (Deg)	Ant Length (ft)	Ant Gain (dBd)	Power	Power Type	Power Units	TX Count	Misc Loss	Total ERP (Watts)	Z (ft) (AGL)	MDT (Deg)	EDT (Deg)
11	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	751	LTE	280	66.0	6	11.46	80.00	TPO	Watt	1	0.00	1119.7	53	0	0
11	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	850	LTE	280	64.0	6	12.76	80.00	TPO	Watt	1	0.00	1510.4	53	0	0
11	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	1900	LTE	280	60.0	6	15.06	160.00	TPO	Watt	1	0.00	5130	53	0	0
12	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	751	LTE	280	66.0	6	11.46	80.00	TPO	Watt	1	0.00	1119.7	53	0	0
12	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	850	LTE	280	64.0	6	12.76	80.00	TPO	Watt	1	0.00	1510.4	53	0	0
12	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	2100	LTE	280	62.0	6	14.76	160.00	TPO	Watt	1	0.00	4787.6	53	0	0
13	T-MOBILE	RFS APX16DWV-16DWVS-C	Panel	1900		120	65.0	4.7	16.27	160.00	TPO	Watt	1	0.00	6778.3	32.5	0	0
13	T-MOBILE	RFS APX16DWV-16DWVS-C	Panel	2100		120	65.0	4.7	16.27	160.00	TPO	Watt	1	0.00	6778.3	32.5	0	0
14	T-MOBILE	RFS APX16DWV-16DWVS-C	Panel	1900		240	65.0	4.7	16.27	160.00	TPO	Watt	1	0.00	6778.3	32.5	0	0
14	T-MOBILE	RFS APX16DWV-16DWVS-C	Panel	2100		240	65.0	4.7	16.27	160.00	TPO	Watt	1	0.00	6778.3	32.5	0	0
15	T-MOBILE	RFS APX16DWV-16DWVS-C	Panel	1900		0	65.0	4.7	16.27	160.00	TPO	Watt	1	0.00	6778.3	32.5	0	0
15	T-MOBILE	RFS APX16DWV-16DWVS-C	Panel	2100		0	65.0	4.7	16.27	160.00	TPO	Watt	1	0.00	6778.3	32.5	0	0
16	T-MOBILE	Generic	Panel	1900		0	65.0	4.6	15.43	160.00	TPO	Watt	1	0.00	5586.2	32.5	0	0
16	T-MOBILE	Generic	Panel	2100		0	65.0	4.6	15.23	160.00	TPO	Watt	1	0.00	5334.8	32.5	0	0
17	SPRINT (T-Mobile)	RFS APXVSPP18-C-A20	Panel	862		0	65.0	6	13.37	100.00	TPO	Watt	1	0.00	2172.7	45	0	0
17	SPRINT (T-Mobile)	RFS APXVSPP18-C-A20	Panel	1900		0	65.0	6	16.27	90.00	TPO	Watt	1	0.00	3812.8	45	0	0
17	SPRINT (T-Mobile)	RFS APXVSPP18-C-A20	Panel	1990		0	65.0	6	16.27	90.00	TPO	Watt	1	0.00	3812.8	45	0	0
18	SPRINT (T-Mobile)	Kmw ET-X-WM-18-65-8P	Panel	2500		0	72.0	5.1	15.86	160.00	TPO	Watt	1	0.00	6167.7	45	0	0
19	SPRINT (T-Mobile)	RFS APXVSPP18-C-A20	Panel	862		120	65.0	6	13.37	100.00	TPO	Watt	1	0.00	2172.7	22.7	0	0
19	SPRINT (T-Mobile)	RFS APXVSPP18-C-A20	Panel	1900		120	65.0	6	16.27	90.00	TPO	Watt	1	0.00	3812.8	22.7	0	0
19	SPRINT (T-Mobile)	RFS APXVSPP18-C-A20	Panel	1990		120	65.0	6	16.27	90.00	TPO	Watt	1	0.00	3812.8	22.7	0	0



Exhibit 02:
1431 San Bruno
Antennas

Ant ID	Operator	Antenna Make and Model	Ant Type	TX Freq (MHz)	Technology	Az (Deg)	Horizontal Beamwidth (Deg)	Ant Length (ft)	Ant Gain (dBd)	Power	Power Type	Power Units	TX Count	Misc Loss	Total ERP (Watts)	Z (ft) (AGL)	MDT (Deg)	EDT (Deg)
20	SPRINT (T-Mobile)	RFS APXVSP18-C-A20	Panel	862		240	65.0	6	13.37	100.00	TPO	Watt	1	0.00	2172.7	22.7	0	0
20	SPRINT (T-Mobile)	RFS APXVSP18-C-A20	Panel	1900		240	65.0	6	16.27	90.00	TPO	Watt	1	0.00	3812.8	22.7	0	0
20	SPRINT (T-Mobile)	RFS APXVSP18-C-A20	Panel	1990		240	65.0	6	16.27	90.00	TPO	Watt	1	0.00	3812.8	22.7	0	0

Note: The Z reference indicates antenna height above the ground level (AGL). ERP values provided by the client and used in the modeling may be greater than are currently deployed. For additional modeling information, refer to Appendix B. Proposed equipment is tagged as *(Proposed)* under *Operator* or *Antenna Make and Model*.

2 Site Compliance

2.1 Site Compliance Statement

Upon evaluation of the cumulative RF exposure levels from all operators at this site, Sitesafe has determined that:

Verizon Wireless will be compliant with FCC rules and regulations, as described in OET Bulletin 65, **upon implementation of the proposed remediation.** The corrective actions needed to make this site compliant are located in Section 2.2.

The compliance determination is based on theoretical modeling, RF signage placement recommendations, proposed antenna inventory and/or the level of restricted access to the antennas at the site. Any deviation from the Verizon Wireless proposed deployment plan could result in the site being rendered non-compliant.

2.2 Actions for Site Compliance

Based on common industry practice and our understanding of FCC and OSHA requirements, this section provides a statement of recommendations for site compliance. If required, RF alert signage recommendations have been proposed based on theoretical analysis of MPE levels. Where applicable, barriers can consist of locked doors, fencing, railing, rope, chain, paint striping or tape, combined with RF alert signage.

Verizon Wireless will be compliant if the following changes are implemented:

Base of Monopole

- Install a Warning sign.
- Remove the existing Caution sign.

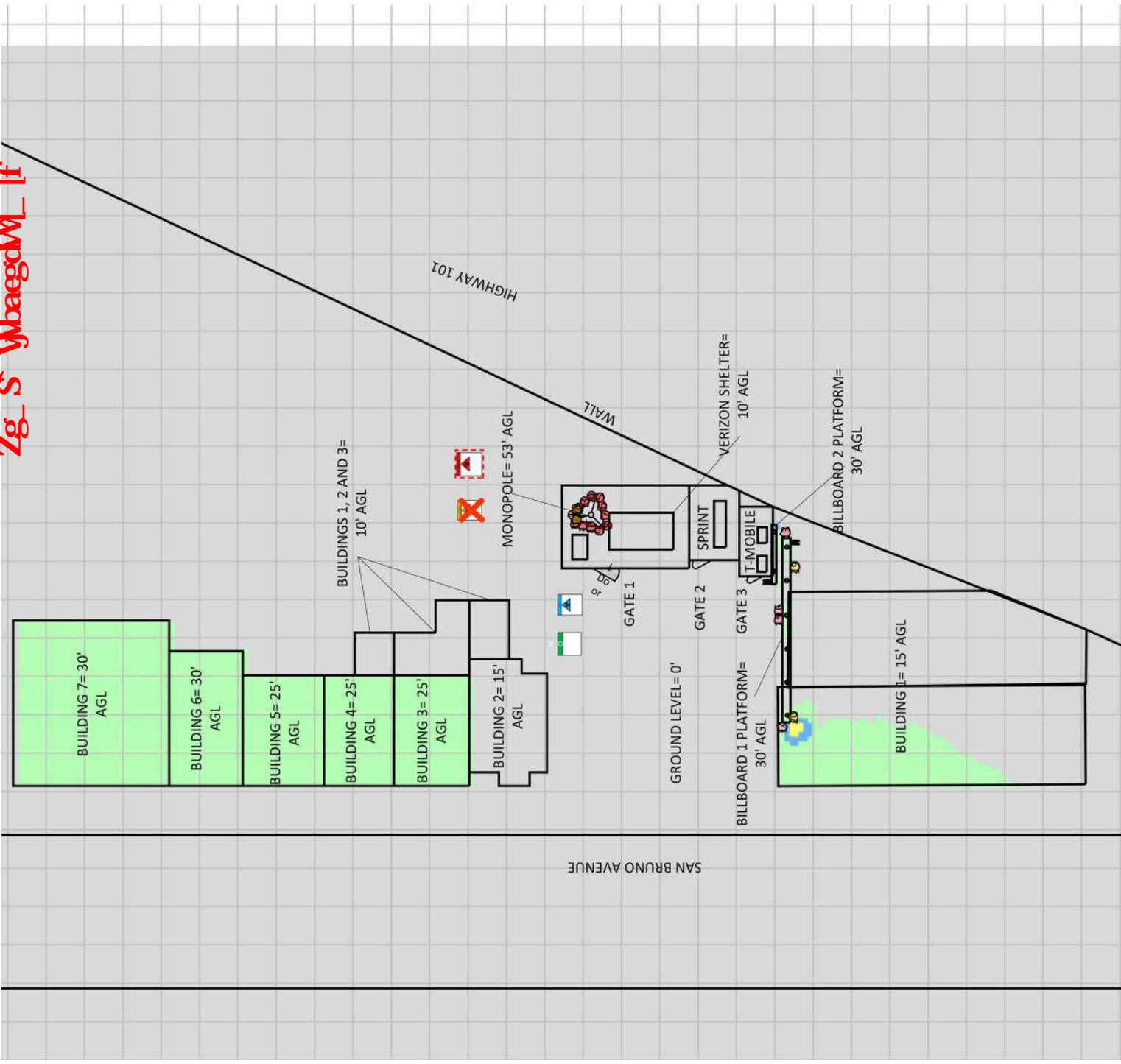
Note: The compound gate or the access point must be locked/restricted for the site to be in compliance.

Note: Ensure all existing signage documented in this report still exists on site unless otherwise indicated.

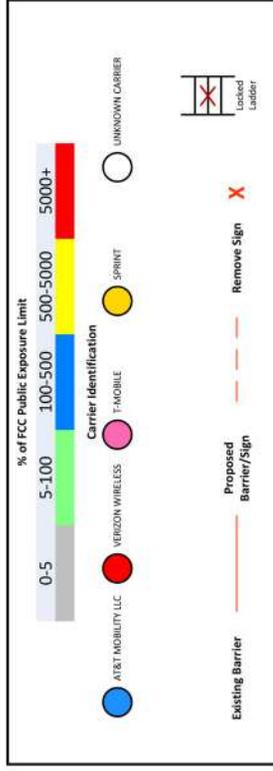
RF Exposure Simulation For: SF POTRERO WEST
Composite View



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% of FCC Public Exposure Limit
Spatially Averaged



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Disposition / Stage:

Action Date	Stage	Comments
2/28/2022	TRIAGE	
2/28/2022	FILING	
2/28/2022	FILED	
9/28/2022	APPROVED	
9/28/2022	ISSUED	
10/14/2022	SUSPEND	Per BOA Appeal No. 22-071

Contact Details:

Contractor Details:

License Number: 1058024
Name: RAVIKANTH GANAPAVARAPU
Company Name: RAVIG INC DBA SALIENT GLOBAL TECHNOLOGI
Address: 510 GARCIA AV * PITTSBURG CA 94565-0000
Phone:

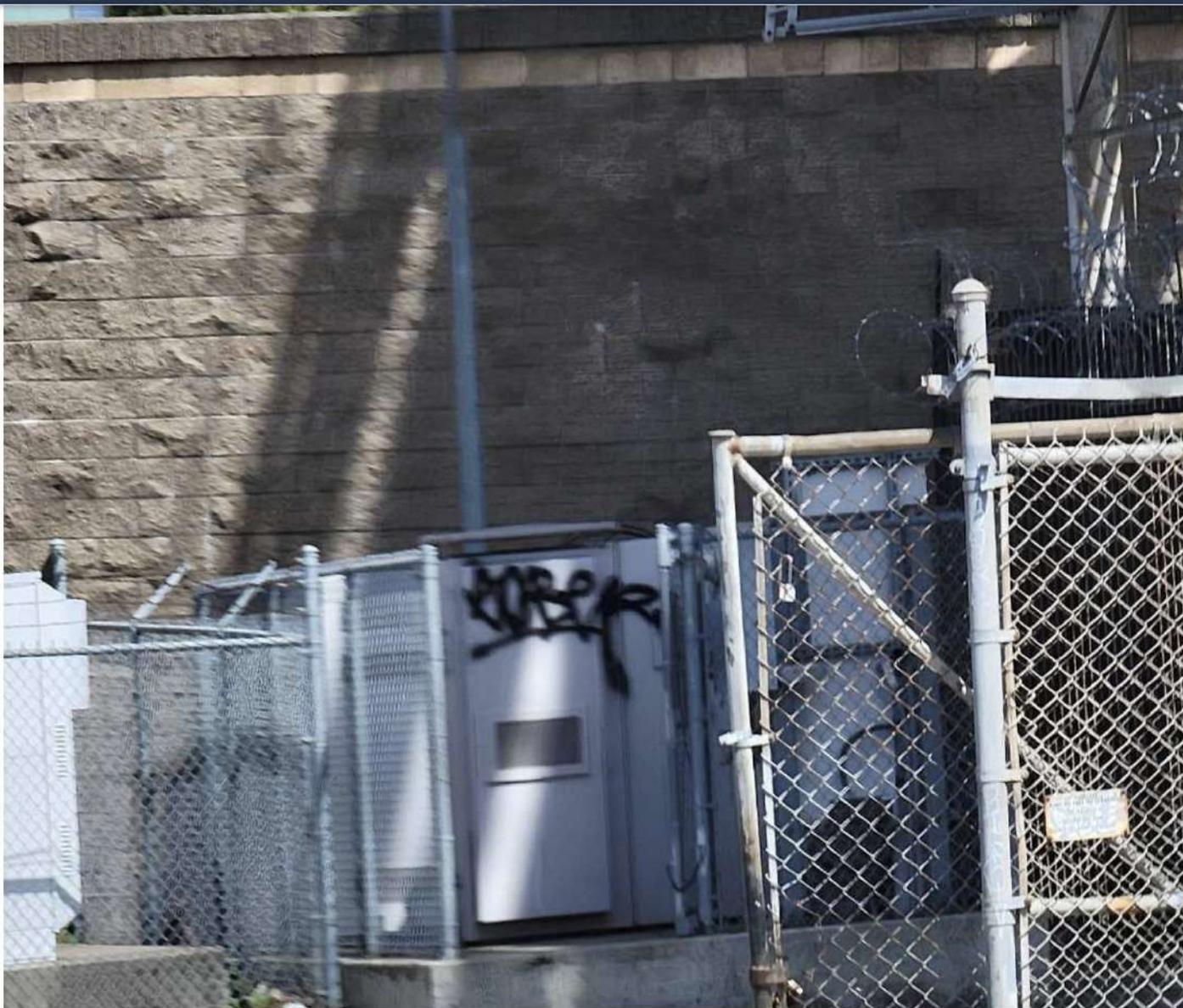
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Addenda Details:

Description:

Step	Station	Arrive	Start	In Hold	Out Hold	Finish	Checked By	Hold Description
1	BID-INSP	2/28/22	2/28/22			2/28/22	SAUNDERS PHILIP	
2	INTAKE	2/28/22	2/28/22			2/28/22	SHAWL HAREGGEWAIN	
3	CP-ZOC	3/31/22	3/31/22			3/31/22	OROPEZA EDGAR	Approved site mod - existing macro site tower approved for said work - REMOVE 9 ANTENNA, ADD 12 ANTENNAS. REMOVE 12 RADIO UNITS, ADD 9 RADIO UNITS. INSTALL MOUNT MODIFICATIONS FOR ANTENNAS.
4	PAD-STR	5/25/22	5/25/22			5/25/22	RALLS MATTHEW	otc approved 5/25/22. Recinded approval per Planning or Health comments email from Stephanie - 8/15/22.
5	BLDG	9/28/22	9/28/22			9/28/22	JONES DAVID	+90 DAYS RECHECK
6	MECH	6/13/22	6/13/22			8/22/22	ORTEGA REYNALDO	re-approved OTC, plans back to customer for HEALTH review Approved OTC, plans back to customer for SFFD review
7	MECH-E	9/28/22	9/28/22			9/28/22	JACOBO MARCO	2022-09-28 - marco.jacobo@sfgov.org: Acceptance issued OTC for Electrical Title 24 only. The Electrical Engineer of Record shall ensure full coordination with other disciplines. All electrical work shall be subject to verification and final acceptance by SFDBI Electrical Inspection Division, and shall comply with the 2019 San Francisco Electrical Code and 2019 California Energy Code. Plans returned to customer.
8	SFFD	8/2/22	8/2/22			8/2/22	ZIEGLER ERIK	8/2/22 Approved OTC by Ziegler of SFFD. Plans returned to applicant.
9	INTAKE	8/22/22	8/22/22			8/22/22	BUFKA SUSAN	ADDED 3 SHEETS FOR EMF STUDY
10	HEALTH	8/22/22	8/22/22			8/22/22	DUQUE ARTHUR - DPH	Approved OTC.
11	CPB	9/28/22	9/28/22			9/28/22	SONG SUSIE	90-DAY BY DJ

This permit has been issued. For information pertaining to this permit, please call 628-652-3450.



Contains racial slurs or profanity? Yes

Object: Building - Commercial

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Location

Notes



311 Cases

Based on [311 Cases](#)

SF311 cases created since 7/1/2008 with location information. Download data using 'export' button to the right.

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[More Views](#) |
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 [Visualize](#) |
 [Export](#) |
 [Discuss](#) ¹⁶ |
 [Embed](#) |
 [About](#)

Updated	Status	Status Notes	Responsible Ag...	Category	Request Type	Request Details	Address	Street	Supervisor D...	Neighborhood	Police D
11/08/2022 08:09:0...	Closed	Case Resolved - No Acti...	DPW BSM Queue	General Req...	request_for_servi...	bsm - request_for_service	1435 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
11/04/2022 08:05:1...	Open	accepted	DPW BSM Queue	General Req...	request_for_servi...	bsm - request_for_service	1435 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
11/02/2022 08:48:0...	Closed	Case is a Duplicate - Th...	DBI Building Inspec...	General Req...	request_for_servi...	bses - request_for_service	1435 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
10/25/2022 10:15:1...	Closed	Case is a Duplicate - Re...	DPW Ops Queue	Graffiti	Graffiti on Sidew...	Sidewalk_in_front_of_property - Offensive	1435 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
10/25/2022 02:33:2...	Open	open	Clear Channel - Tra...	Graffiti	Graffiti on Buildin...	Building_other - Offensive	1435 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
10/23/2022 07:00:4...	Closed	Case Resolved - 10/23/...	DPW Ops Queue	Graffiti	Graffiti on Street	Street - Offensive	1435 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
10/19/2022 09:35:5...	Closed	Case Resolved - 10/19/...	DPW Ops Queue	Graffiti	Graffiti on Buildin...	Building_commercial - Offensive	1435 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
10/12/2022 03:18:0...	Closed	Case is a Duplicate - To ...	DBI Building Inspec...	General Req...	request_for_servi...	bsm - request_for_service	1435 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
10/19/2022 05:15:0...	Open	accepted	DPW Ops Queue	Graffiti	Graffiti on Buildin...	Building_commercial - Offensive	1435 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
10/26/2022 09:30:1...	Closed	Case Resolved - Per pro...	Clear Channel - Tra...	Graffiti	Graffiti on Buildin...	Building_other - Offensive	1431 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
10/13/2022 10:00:0...	Closed	Case Resolved - 10/4/2...	DPW Ops Queue	Graffiti	Graffiti on Sidew...	Sidewalk_in_front_of_property - Offensive	1431 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
10/04/2022 08:09:0...	Closed	Case Resolved - 10/4/2...	DPW Ops Queue	Graffiti	Graffiti on Buildin...	Building_commercial - Offensive	1431 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
10/04/2022 01:34:3...	Closed	Case Resolved - 10/4/2...	DPW Ops Queue	Graffiti	Graffiti on Buildin...	Building_commercial - Offensive	1435 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
09/25/2022 12:33:2...	Closed	Case Resolved - 9/25/2...	DPW Ops Queue	Graffiti	Graffiti on Buildin...	Building_commercial - Offensive	1435 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
09/21/2022 07:18:5...	Closed	Case Resolved - 9/21/2...	DPW Ops Queue	Graffiti	Graffiti on Buildin...	Building_commercial - Offensive	1431 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
09/28/2022 10:58:4...	Closed	Case Resolved - SES Gra...	DPW Ops Queue	Graffiti	Graffiti on Sidew...	Sidewalk_in_front_of_property - Offensive	1435 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION
09/26/2022 09:29:0...	Closed	Case Resolved - Per pro...	Clear Channel - Tra...	Graffiti	Graffiti on Buildin...	Building_other - Offensive	1435 SAN BRUNO AVE, SAN...	SAN BRUNO ...	10	Potrero Hill	MISSION

Enter an address here to get started...

Re-center

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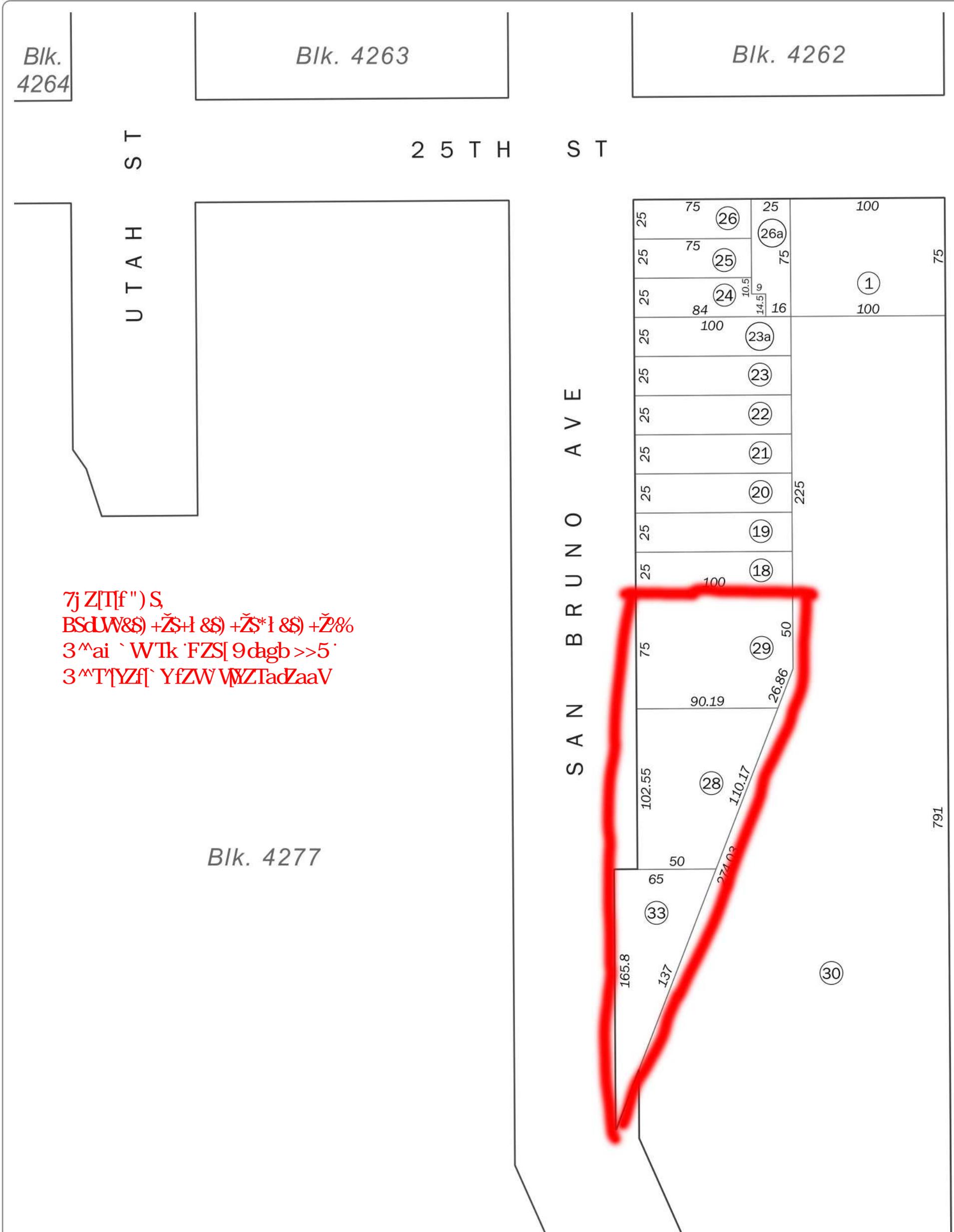


Potrero Del Sol Park

Potrero Del Sol Community Garden

James Lick Fwy

Vermont St



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Blk. 4277



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Blight. Abandoned lot

Object: Overgrown Lot (Blight)

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Location	Notes
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address: 1435 San Bruno Ave

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VODKA
HUMBOLDT
DISTILLERY

1423

EXTRA SPACE STORAGE
extraspaces.com

LIU'S METAL PRODUCTS
METAL FABRICATION & WELDING
415)957-1158

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Contains racial slurs or profanity? Yes

Object: Street

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Location

Notes

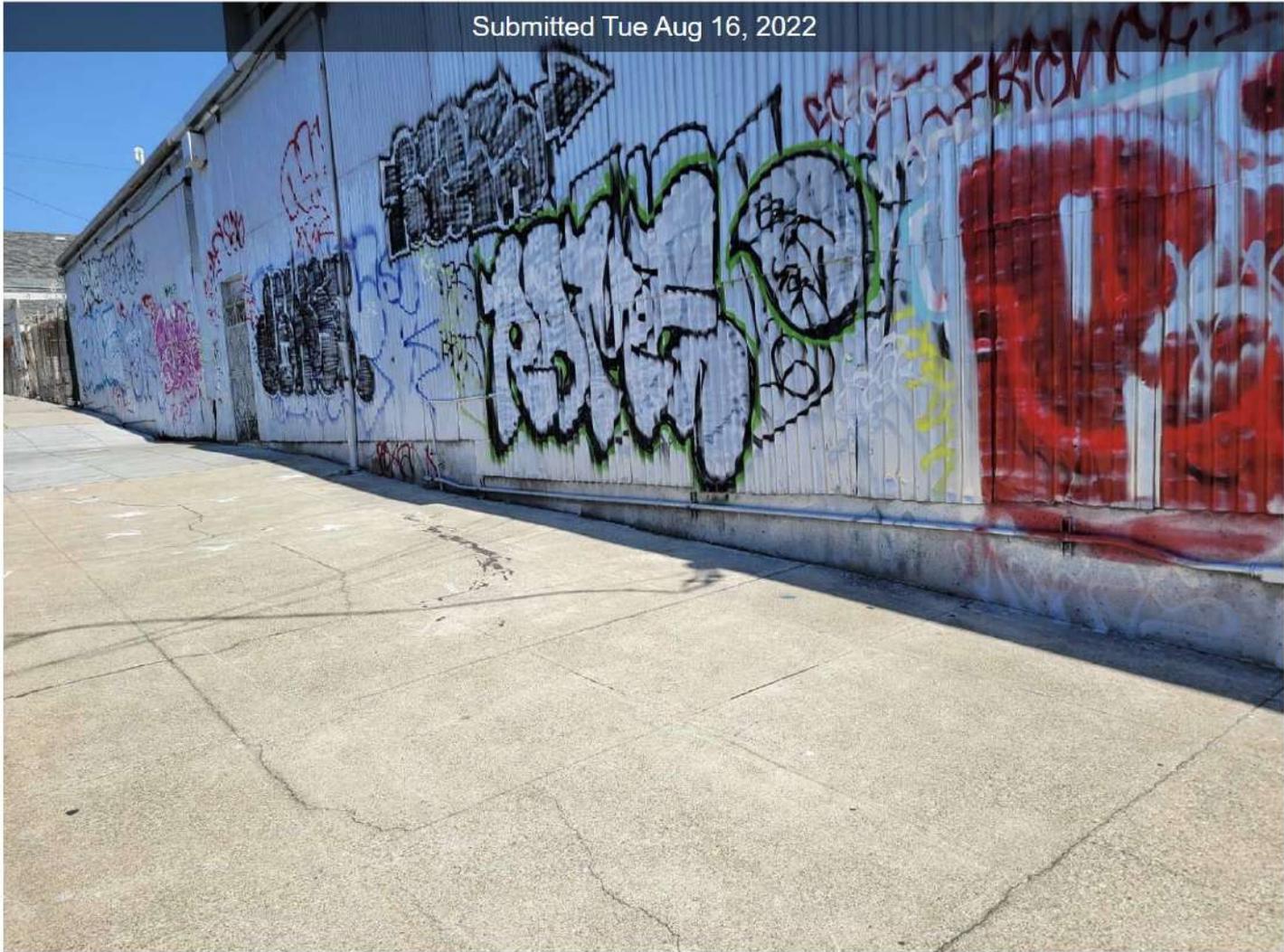


address: 1435 San Bruno Ave



CLOSED Case Transferred. To track, visit <http://dbiweb.sfgov.org/dbipts/> and search by Complaint Number. See Complaint #202294469 or call (628) 652-3400, Option 1. - 3 months ago #15701744

Submitted Tue Aug 16, 2022



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T\YZfS' VYcXff

Blight. Abandoned building

Object: Neglected Building (Blight)

Shootout In Potrero Hill Leaves Two Injured, Multiple Homes Riddled With Bullets

Exhibit 08:
ongoing blight of these parcels has a direct negative impact on our neighborhood

An apparent shootout early Monday morning left four residential buildings on San Bruno Avenue riddled with bullet holes, and left two individuals with non-life-threatening injuries.

The shootout happened around 4:23 a.m. Monday near 25th Avenue and San Bruno Avenue, in the vicinity of Bryant Elementary School and about a block away from Zuckerberg SF General Hospital. It's not clear how many shooters were involved.

KPIX reported from the scene later on Monday, and brought back footage of the many bullet holes in the sides of homes on San Bruno Avenue — and one apartment under construction where bullets came inside and shot through multiple walls.



BRIEF SUBMITTED BY THE PERMIT HOLDER(S)

MACKENZIE & ALBRITTON LLP

155 SANSOME STREET, SUITE 800
SAN FRANCISCO, CALIFORNIA 94104

TELEPHONE 415/288-4000
FACSIMILE 415/288-4010

November 22, 2022

VIA EMAIL

President Rick Swig
Vice-President Jose Lopez
Commissioners Alex Lemberg,
John Trasviña, and J.R. Eppler
San Francisco Board of Appeals
49 South Van Ness Avenue, Suite 1475
San Francisco, California 94103

Re: Appeal No. 22-071, SFCOV v. Department of Building Inspection
Verizon Wireless Site Modification
Building Permit 202202288869, 1431 San Bruno Avenue
Board of Appeals Hearing, November 30, 2022

Dear President Swig, Vice-President Lopez, and Commissioners:

We submit this letter on behalf of GTE Mobilnet of California LP d/b/a Verizon Wireless (“Verizon Wireless”) and Crown Castle in opposition to the appeal referenced above. The appeal challenges Building Permit 202202288869, which authorizes minor modifications to Verizon Wireless’s antenna facility on a tower at 1431 San Bruno Avenue (the “Modification”). As we explain, federal law required the Department of Building Inspection (“DBI”) to approve the Modification because it qualifies as an “eligible facilities request” pursuant to the Spectrum Act and Federal Communications Commission (“FCC”) rules, which require expedited approval of wireless facility modifications. Multiple City departments thoroughly reviewed the Modification and confirmed that it was consistent with federal law and applicable building codes.

San Francisco Committee of Vigilance (“Appellant”) does not present any grounds for this Board to overturn DBI’s approval and overlooks these federal

requirements. We respectfully ask that you deny this appeal and allow Verizon Wireless to bring improved wireless service to this neighborhood.

I. Description Of The Approved Modification

The existing facility is a 56-foot monopole tower on San Bruno Avenue adjacent to Highway 101, north of Cesar Chavez Street. The tower is located at the rear of the subject property, and currently supports nine Verizon Wireless panel antennas attached to three mounting brackets near the top of the tower, plus a total of 12 Verizon Wireless radios mounted directly behind the antennas. Two Sprint panel antennas are attached to the tower below Verizon Wireless's installation.

To provide new 5G service, Verizon Wireless has been upgrading its network facilities to deploy new frequency spectrum recently licensed from the FCC. The Modification involves removal of all nine of Verizon Wireless's panel antennas and all twelve radios, which will be replaced with twelve new antennas and six radios. The existing mounting brackets will remain, and Verizon Wireless will install additional mounting hardware next to those brackets to ensure the structural integrity of the Modification. There will be no other changes to the tower or existing ground-mounted equipment.

There will be minimal change in the tower's appearance because the Modification replaces equipment in the same location. *See* Photosimulations, attached as Exhibit A and Construction Plans, attached as Exhibit B.

II. The Modification Is An "Eligible Facilities Request" That Causes No "Substantial Change" And Was Properly Approved Per FCC Rules

To expedite deployment of wireless infrastructure, Congress adopted Section 6409 of the *Middle Class Tax Relief and Job Creation Act of 2012* (the "Spectrum Act").

Section 6409 requires that:

...a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.” 47 U.S.C. § 1455(a)(1). An “eligible facilities request” is any collocation of new equipment, removal of existing equipment, or replacement of existing equipment.

47 U.S.C. § 1455(a)(2).

In 2014, the FCC issued an implementing order with rules that govern local review and approval of eligible facilities requests. *In Re: Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, Etc.*, 29 FCC Rcd 12865 (FCC October 17, 2014) (the “Spectrum Act Order”). The FCC defined key terms in the statute, including “existing” and “substantial change.” “Existing” means that an eligible support structure such as a tower “has been reviewed and approved under the applicable zoning or siting process.” 47 C.F.R. § 1.6100(b)(5). “Substantial Change” is defined with six thresholds for: (i) height, (ii) protrusion, (iii) number of cabinets, (iv) excavation, (v) defeat of concealment, and (vi) compliance with prior conditions of approval that are not preempted by the first four thresholds. 47 C.F.R. § 1.6100(b)(7).

The tower supporting Verizon Wireless’s antennas is “existing” and eligible for modification because it has been approved under the City’s applicable permit process. Verizon Wireless’s predecessor, GTE Mobilnet, first constructed a wood tower at the site pursuant to a 1995 building permit (774059/9420985). In 1997, the Planning Commission approved a conditional use authorization that allowed replacement of the

wood tower with the current metal tower and collocation of Sprint antennas. *See* Planning Commission Motion 14328, March 6, 1997 (Case No. 97.043C), attached as Exhibit C. Subsequent permits allowed for modification of the antenna facilities on the tower, including building permits approved in 2009 (200906180755, Verizon Wireless), 2013 (201211295141, Sprint, finalized by 201402078091), 2015 (201505186571, Sprint) and 2016 (201505186569, Verizon Wireless). Copies of these modification permit records are attached as Exhibit D.

In San Francisco, eligible facilities requests are approved by DBI through a Form 8 alteration permit, a type of building permit. The application is reviewed by multiple departments, including the Planning Department which confirms that a proposed modification qualifies as an eligible facilities request. This process was confirmed in a 2021 Zoning Administrator Letter of Determination issued to Verizon Wireless, which resulted in an updated application checklist tailored to eligible facilities requests. *See* Letter of Determination 2021-003477ZAD, June 16, 2021, attached as Exhibit E; see also Planning Department *Eligible Facilities Request Checklist*.¹

Pursuant to this process, the Planning Department reviewed the Modification prior to DBI's approval, and confirmed that the Modification causes no "substantial change" according to FCC rules. Only the first two "substantial change" thresholds regarding height and protrusion are relevant. The construction plans show that the height of the facility will increase only three inches, well under the minimum height increase of 10 percent (or 5.6 feet) allowed by FCC rules. 47 C.F.R. § 1.6100(b)(7)(i); Exhibit B at p. C-

¹ Available at: sfplanning.org/sites/default/files/forms/Wireless_EFR_Checklist_fillable.pdf, retrieved November 22, 2022.

2. The new panel antennas will protrude only a few inches beyond the existing antennas, and well under the 20 feet of protrusion from the tower allowed by FCC rules. 47 C.F.R. § 1.6100(b)(7)(ii); Exhibit B at p. C-3. The other four “substantial change” thresholds are irrelevant because there will be no new cabinets or excavation, the existing tower is unconcealed, and there are no prior conditions of approval that are not preempted by FCC rules.

Prior to DBI’s approval, the Department of Public Health (“DPH”) confirmed that radio frequency (“RF”) exposure from the facility following the Modification will comply with FCC guidelines, and the Fire Department confirmed compliance with all fire codes. DBI verified compliance with applicable building and safety codes, as confirmed by approval of the building permit attached as Exhibit F. In sum, the Modification was properly approved consistent with federal law and applicable health and safety regulations.

III. Appellant’s Arguments Have No Merit

Appellant has raised several points, none of which warrant granting their appeal. Appellant’s appeal is centered on heartfelt complaints of blight in the neighborhood. However, the Spectrum Act and FCC rules required approval and constrain the City’s review of the Modification. Other improvements on the property mentioned by Appellant are irrelevant, including the billboard along the adjacent parcel which supports other carriers’ antennas, as well as other uses on the property and the adjacent sidewalk.

A. Existing Antennas Were Properly Approved, and FCC Rules Preempt Any Prior Restrictions on Number of Antennas

Appellant alleges that the number antennas attached to the tower exceeds those approved, citing permit records from 1997 and 2015. However, Appellant overlooks other

permits that authorized additional panel antennas, including those approved in 2009, 2013, and 2016, referenced above. The 2015 Planning Department record for a prior modification, referenced by Appellant, concludes, “Post installation site total to feature 9 antennas for Verizon Wireless (monopole); 2 antennas for Sprint (2 on monopole....” This matches the number of existing panel antennas on the monopole. Planning Department Record 2015-006523PRL (associated with Building Permit 201505186571), attached as Exhibit G. The only modification permit issued afterward, Building Permit 201505186569 approved in 2016, authorized a Verizon Wireless antenna swap that did not result in additional panel antennas.

FCC rules provide for replacement of any antennas and collocation of any number of new antennas, provided they cause no “substantial change,” which the Modification does not. Any prior condition of approval establishing a maximum number of antennas is preempted because the Modification falls under the FCC’s “substantial change” thresholds for increased height and protrusion. *See* 47 C.F.R. § 1.6100(b)(7)(vi). This ground for appeal fails to acknowledge preemption by FCC rules and must be dismissed.

B. Verizon Wireless Has Repeatedly Provided Its Community Liaison Contact To The Planning Department

Appellant claims that the Planning Department does not have a record of a community liaison for this facility on file. However, Verizon Wireless has consistently reported this information, consistent with the City’s 1996 *Wireless Telecommunications Services (WTS) Facilities Siting Guidelines* (the “WTS Guidelines”).² Verizon Wireless

² Available at: <https://default.sfplanning.org/currentplanning/wireless/wtsguidelines.pdf>, retrieved November 22, 2022.

has provided the name and contact information of its community liaison (Lex Munoz) in its five-year plan updates, which have been filed with the Planning Department every six months for several decades. Most recently, a Verizon Wireless compliance contractor sent the latest five-year plan update to the Planning Department on October 11, 2022, as confirmed by the email and excerpt of the five-year plan spreadsheet attached as Exhibit H. Because Verizon Wireless has diligently provided this information, this ground for appeal must be dismissed.

C. The Facility After Modification Will Continue to Comply With
FCC Radio Frequency Exposure Guidelines

Appellant claims that the existing facility violates FCC regulations regarding radio frequency (“RF”) exposure. However, Appellant has misread the Site Compliance Report for the Modification submitted by Verizon Wireless, attached as Exhibit I. The report evaluates the exposure that will result after the Modification, not the existing facility for which RF exposure compliance has already been confirmed by DPH in its review of prior modification permits. *See, e.g.*, Verizon Wireless Building Permit 201505186569, approved by DPH on May 19, 2015.

The Site Compliance Report recommends one measure to ensure compliance with FCC regulations after the Modification, which is replacement of the “caution” sign at the base of the tower with a “warning” sign, consistent with FCC rules. Site Compliance Report, p. 4; 47 C.F.R. § 1.1307(b)(4). The tower base is accessible only to authorized personnel, and the signage provides direction to those working on the tower.

Appellant is also incorrect that the site is operating at 100 percent of the FCC’s public exposure limit. On the map of surrounding properties on page 6 of the Site

Compliance Report, green shading encompasses several properties north of the tower. According to the report, “Green represents areas predicted to be *between 5% and 100%* of the General Public MPE limits. The General Public can access these areas with no restrictions.” Site Compliance Report, p. 21 (emphasis added).

An August 15, 2021 compliance report for the existing facility by Dtech Communications, attached as Exhibit J, measured the actual RF exposure at both ground level and the nearest building as less than one percent of the FCC limit. DPH reviewed the Site Compliance Report for the Modification and granted its approval of the building permit application on August 22, 2022, according to the Permit Details Report attached as Exhibit K.

Appellant uncovers no violation of the FCC’s exposure regulations for either the existing facility or the Modification. This ground for appeal must be dismissed.

D. The City’s Visual Impact Criteria Were Factors For Approval Of The Original Tower But Are Preempted By Federal Law For This Eligible Facilities Request

Appellant claims that the existing tower facility violates various visual impact criteria of the 1996 WTS Guidelines. The tower was constructed in 1997, when the property was zoned M1–light industrial. In its 1997 approval, the Planning Commission found that the tower facility was consistent with the WTS Guidelines, which were the basis for conditions of approval of that permit. Exhibit C, Motion 14328, Finding 5.

Because the Modification qualifies as an eligible facilities request, the only criteria the City may consider are the FCC’s six “substantial change” thresholds. FCC rules preempt any City policies or prior conditions of approval regarding visual impact.

Notably, the existing tower is unconcealed, so the FCC’s fifth “substantial change” threshold requiring that a modification not defeat any existing concealment elements is irrelevant. The FCC emphasized that because its “substantial change” thresholds are objective, approval of eligible facilities requests is “obligatory and non-discretionary.” Spectrum Act Order, ¶¶ 188-89, 227, 232

Accordingly, the subjective visual impact criteria of WTS Guidelines such as “minimize visual impacts” and “compatible with the scale of the locale” cannot be decision factors for approval of the Modification. The nature of the surrounding neighborhood, whether industrial or residential, is beyond the City’s purview for an eligible facilities request. The City cannot condition approval of this building permit on provision of landscaping or new camouflage, as Appellant requests. This ground for appeal is preempted by FCC rules and must be dismissed.

E. There Has Never Been A Limit On The Permit Term

Appellant is wrong in alleging that 1997 conditional use authorization required renewal. The 1997 approval did not impose any limit on the permit term. See Exhibit C. Current Planning Code Section 303(s), enacted in 2016 and referenced by Appellant, imposes a 10-year term limit for certain wireless facilities, but explicitly does not apply retroactively. Ordinance 166-16, August 2, 2016 (File # 160477)³; Planning Code § 303(s)(2)(c) [“This provision shall not apply to Conditional Use Authorizations granted prior to the effective date of this Subsection(s)”]. There was never a permit term limit, so this ground for appeal must be dismissed.

³ Available at: sfgov.legistar.com/View.ashx?M=F&ID=4624857&GUID=67C62C50-141B-41D0-8FBB-9388ED5B6755, retrieved November 22, 2022.

F. Conditions Elsewhere On The Property Beyond The Tower Facility Are Irrelevant To The Modification, And The Planning Department Has Not Issued A Notice of Violation

Appellant complains about “blight” and “neglect” on the property, pointing to a billboard south of the tower facility and referencing live events and sidewalk conditions. However, those observations are irrelevant to the FCC’s rules for eligible facilities requests, which limit the City’s review to the existing tower facility. Appellant references a complaint filed with the Planning Department regarding the tower facility in May 2022 (File 2022-006441ENF). That complaint raised three claims already addressed above: the community liaison contact, permit term, and visual impact.

As of the date of this letter, the Planning Department has sent only a notice of complaint, not a notice of violation, and it has taken no action on the complaint. Anyone can file a complaint, but the process to confirm a violation requires the Planning Department to provide a notice of violation to the responsible party, an opportunity for a hearing or appeal, and an opportunity to correct any violation. Planning Code §§ 176, 176.1; *see also* Exhibit C, Condition 12. Indeed, a complaint alleging that there was an excessive number of antennas on this tower facility was filed in 2018, and the Planning Department found no violation. See Planning Department Record 2018-015625ENF.

Appellant complains about graffiti on the property, but the tagged utility cabinet in the photograph they provided does not belong to Verizon Wireless. The Department of Public Works is responsible for graffiti abatement on private property. *See* Public Works Code Article 23: Graffiti Removal and Abatement. The Modification and this appeal proceeding are not the appropriate venue for graffiti complaints.

G. The Planning Department Confirmed Its Approval Of The Modification

In their request for rescheduling of the November 30, 2022, hearing, which the Board President denied, Appellant claimed that the Planning Department rescinded its approval of the Modification, but that is not true. According to DBI's Permit Details Report for the Modification attached as Exhibit K, Planner Edgar Oropeza approved the Modification on March 31, 2022. That approval is consistent with the Planning Department's own record for its review of the building permit, Record 2022-002927PRL attached as Exhibit L, which does not list any further action after March 31, 2022.

The Permit Details Report notes that DBI's structural plans approval division (PAD-STR) reviewed the Modification over the counter on May 25, 2022, then mentions a rescinded approval "per Planning or Health comments" on August 15, 2022. A subsequent over-the-counter review by mechanical review services (MECH) confirmed its approval on August 22, 2022, and DPH approved the Modification on the same day. DBI's final approval and issuance of the Permit on September 28, 2022 confirmed that all City departments had granted their approval.

We note that in their original statement filed with the appeal form, Appellant claimed that they did not receive a block book notice for the Modification. A block book notice is required for only those building permit applications that are subject to the San Francisco Planning Code. *See Request a Block Book Notice Informational and Application Packet*, San Francisco Planning Department, p. 1.⁴ The Planning Code does

⁴ Available at: www.sfplanning.org/sites/default/files/forms/BBN_Application.pdf, retrieved November 22, 2022.

not address eligible facilities requests for wireless facilities. The Modification was reviewed pursuant to federal regulations that mandated approval, and in compliance with the 2021 Zoning Administrator Letter of Determination, attached as Exhibit E.

IV. Conclusion

In conclusion, this Board should deny the Appeal and allow Verizon Wireless to move forward with the Modification. Representatives of Verizon Wireless will be present at the hearing to answer any questions.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Paul Albritton".

Paul B. Albritton

cc: William K. Sanders, Esq.
Tina Tam, Deputy Zoning Administrator
Matthew Greene, Department of Building Inspection
Rachna Rachna, Senior Planner

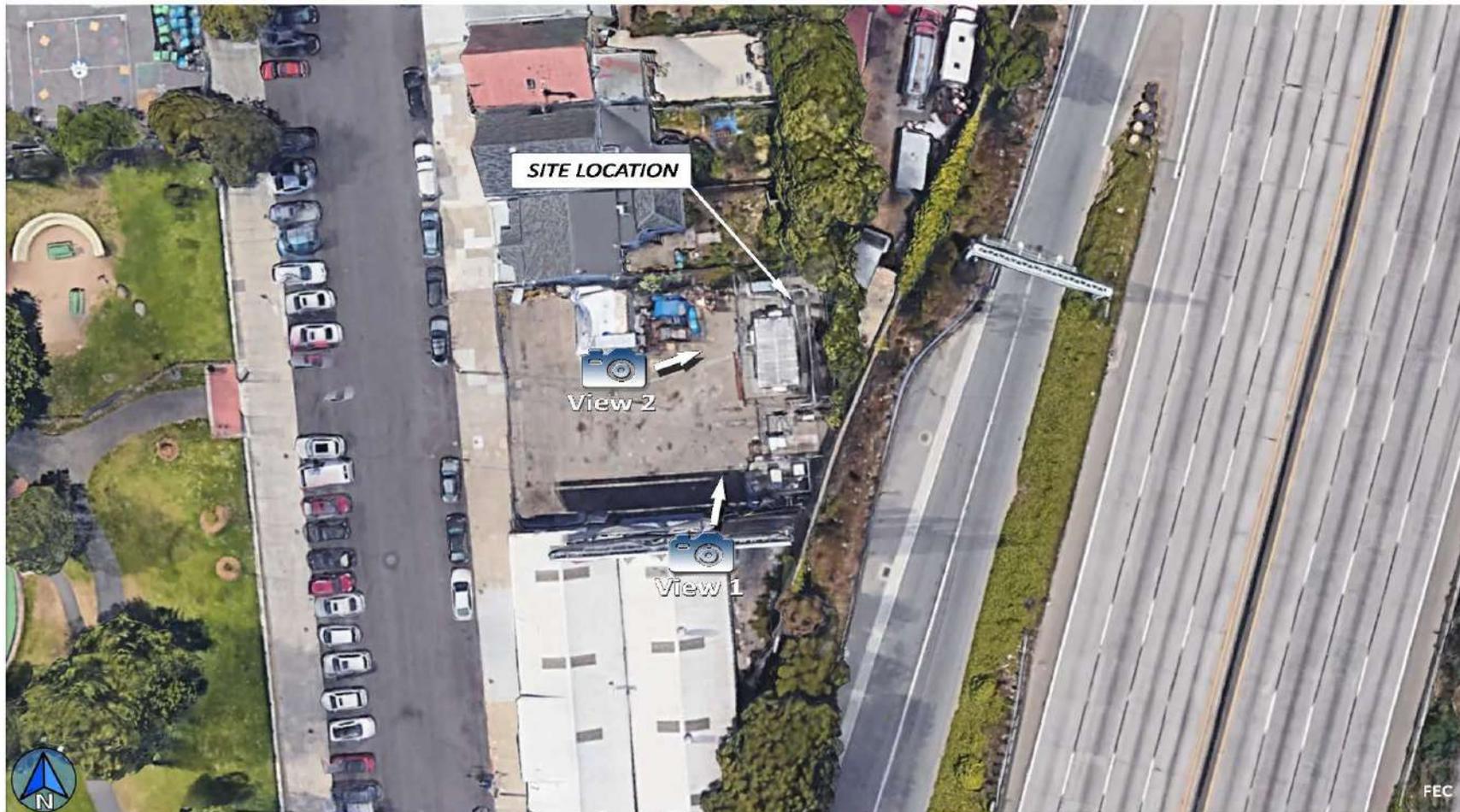
Schedule of Exhibits:

- Exhibit A:** Photosimulations
- Exhibit B:** Construction Plans
- Exhibit C:** Planning Commission Motion 14328, March 6, 1997 (Case No. 97.043C)
- Exhibit D:** Prior DBI Building Permit Reports for Antenna Modifications on Tower
- Exhibit E:** Letter of Determination 2021-003477ZAD, June 16, 2021
- Exhibit F:** Approved Building Permit for Modification
- Exhibit G:** Planning Department Record 2015-006523PRL for Prior Modification
- Exhibit H:** Email from Verizon Wireless Contractor Robert Salem to Planning Department with Five-Year Plan Update, October 11, 2022
- Exhibit I:** SiteSafe Site Compliance Report for Modification, May 20, 2021
- Exhibit J:** Dtech Compliance Report for Existing Facility, August 15, 2021
- Exhibit K:** DBI Building Permit Report 202202288869 for Modification
- Exhibit L:** Planning Department Record 2022-002927PRL for Modification



SITE NAME: SF POTRERO WEST
BUSINESS UNIT #: 815876
APPLICATION ID #: 548000

SITE ADDRESS:
1431 SAN BRUNO AVENUE
SAN FRANCISCO, CA 94107



Vicinity Area

These depictions are for demonstrative purposes only. They are to be used in addition to the engineering drawings for an accurate representation of the site.



Before



After

CROWN CASTLE

FULLERTON
ENGINEERING DESIGN

REVISIONS	DESCRIPTION	DATE	BY

CONFIDENTIAL

NO SCALE

DRAWN BY:

ENG BY:

DATE:

SHEET TITLE:
SIDE BY SIDE

Drawing No:
NOT TO SCALE



Before



After

 CROWN CASTLE																
 FULLERTON ENGINEERING-DESIGN																
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Drawing No: NOT TO SCALE																



VERIZON SITE NUMBER: 123825
VERIZON SITE NAME: POTRERO WEST
SITE TYPE: MONOPOLE
TOWER HEIGHT: 53'-0"

BUSINESS UNIT #: 815876
SITE ADDRESS: 1431 SAN BRUNO AVENUE
SAN FRANCISCO, CA 94107
COUNTY: SAN FRANCISCO
JURISDICTION: CITY & COUNTY OF SAN FRANCISCO

VERIZON SUB 6-GHZ

JURISDICTIONAL APPROVAL:

Exhibit B



VERIZON SITE NUMBER: 123825

BU #: 815876
SF POTRERO WEST
 1431 SAN BRUNO AVENUE
 SAN FRANCISCO, CA 94107
 EXISTING 53'-0" MONOPOLE
 2021.0060.0102

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES/QA
A	03/30/2021	LOI	PRELIMINARY	CJ
0	09/29/2021	SM	CONSTRUCTION	CJ
1	02/21/2022	CJ	CONSTRUCTION	CJ



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: **T-1** REVISION: **1**

SITE INFORMATION

CROWN CASTLE USA INC. SF POTRERO WEST
 SITE NAME:
 SITE ADDRESS: 1431 SAN BRUNO AVENUE
 SAN FRANCISCO, CA 94107
 COUNTY: SAN FRANCISCO
 MAP/PARCEL #: 4279-029
 AREA OF CONSTRUCTION: EXISTING
 LATITUDE: 37° 45' 3.80" N
 LONGITUDE: -122° 24' 13.45" W
 LAT/LONG TYPE: NAD83
 GROUND ELEVATION: 393FT
 CURRENT ZONING: MUR
 JURISDICTION: CITY & COUNTY OF SAN FRANCISCO
 OCCUPANCY CLASSIFICATION: U
 TYPE OF CONSTRUCTION: IIB
 A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
 PROPERTY OWNER: GLOBAL SIGNAL ACQUISITIONS IV LLC
 2000 CORPORATE DR.
 CANONSBURG, PA 15317
 TOWER OWNER: CROWN CASTLE
 2000 CORPORATE DRIVE
 CANONSBURG, PA 15317
 CARRIER/APPLICANT: VERIZON WIRELESS
 1515 E. WOODFIELD ROAD
 SCHAMBURG, IL 60173
 ELECTRIC PROVIDER: TBD
 TELCO PROVIDER: TBD

DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1.1	OVERALL SITE PLAN
C-1.2	SITE PLAN
C-2	EXISTING & NEW ELEVATION
C-3	ANTENNA PLANS & CABLE SCHEDULE
C-4.1	EQUIPMENT SPECS
C-4.2	EQUIPMENT SPECS
C-5	RFDS
C-6	CONFIGURATION DIAGRAM
G-1	GROUNDING PLAN
G-2	GROUNDING DETAILS
G-3	GROUNDING DETAILS
ATTACHED	MOUNT MODIFICATION DESIGN
ATTACHED	EME REPORT

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 11X17. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.

- TOWER SCOPE OF WORK:
- REMOVE (9) ANTENNAS
 - REMOVE (12) RRHs
 - INSTALL (12) ANTENNAS
 - INSTALL (6) RRHs
 - INSTALL MOUNT MODIFICATIONS PER MOUNT MODIFICATION DESIGN BY TOWER ENGINEERING SOLUTIONS, LLC DATED JUNE 28, 2021

NOTE: PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN NOC AT (800) 788-7011 & CROWN CONSTRUCTION MANAGER

APPROVALS

VERIZON SIGNATURE BLOCK		
APPROVAL	SIGNATURE	DATE
SITE ACQUISITION		
CONSTRUCTION		
RADIO		
MICROWAVE		
TELCO		
EQUIPMENT		
PROJECT ADMINISTRATOR		
WO ADMINISTRATOR		
CROWN CASTLE USA INC. SIGNATURE BLOCK		
APPROVAL	SIGNATURE	DATE
SITE ACQUISITION		
PLANNER		
CONSTRUCTION		
PROJECT MANAGER		
UTILITY MANAGER		
LANDLORD		

CONTRACTOR PMI REQUIREMENTS

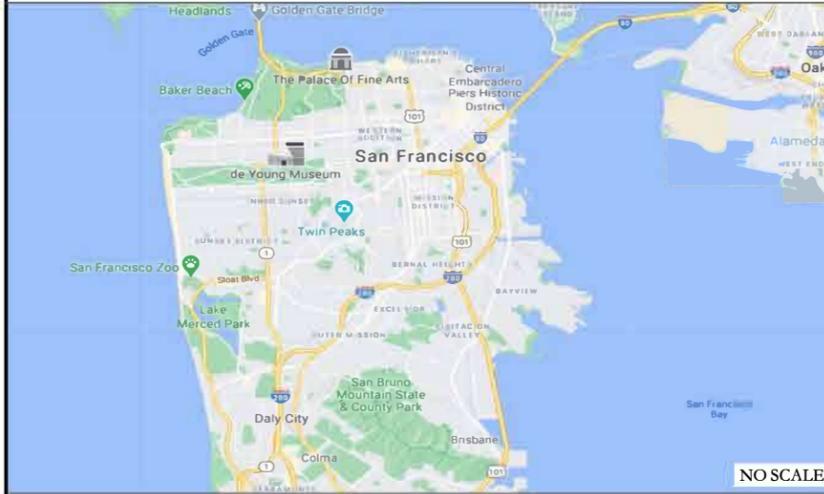
PMI ACCESSED AT	https://pmi.vxwsmart.com
SMART TOOL VENDOR	
PROJECT NUMBER	---
VzW LOCATION CODE (PSLC)	---
*** PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT	

MOUNT MODIFICATION REQUIRED **Y**

VzW APPROVED SMART KIT VENDORS

REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VzW SMART KIT APPROVED VENDORS

LOCATION MAP



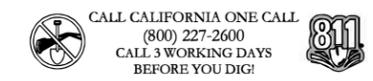
DRIVING DIRECTIONS FROM AIRPORT HOME APPLIANCE (1748 BROADWAY, REDWOOD CITY, CA 94063):
 HEAD EAST ON BROADWAY TOWARD BEECH ST, PASS BY 7-ELEVEN (ON THE LEFT), USE THE LEFT 2 LANES TO TURN LEFT AFTER DENNY'S (ON THE RIGHT), CONTINUE ONTO SEAPORT BLVD, USE THE RIGHT LANE TO TAKE THE RAMP ONTO US-101 N, FOLLOW US-101 N TO BAYSHORE BLVD IN SAN FRANCISCO. TAKE EXIT 432 FROM US-, MERGE ONTO US-101 N, TAKE EXIT 432 TOWARD CESAR CHAVEZ ST/POTRERO AVE, TAKE POTRERO AVE AND 25TH ST TO SAN BRUNO AVE, MERGE ONTO BAYSHORE BLVD, TAKE THE POTRERO AVE, RAMP ON THE LEFT, KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR POTRERO AVENUE, CONTINUE ONTO POTRERO AVE, TURN RIGHT ONTO 25TH ST, TURN RIGHT AT THE 2ND CROSS, STREET ONTO SAN BRUNO AVE. DESTINATION WILL BE ON THE LEFT.

APPLICABLE CODES/REFERENCE DOCUMENTS

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

CODE TYPE	CODE
BUILDING	2019 CALIFORNIA BUILDING CODE (CBC)/2018 IBC
MECHANICAL	2019 CALIFORNIA MECHANICAL CODE (CMC)/2018 UMC
ELECTRICAL	2019 CALIFORNIA ELECTRICAL CODE (CEC)/2017 NEC

REFERENCE DOCUMENTS:
 STRUCTURAL ANALYSIS: BY OTHERS
 DATED:
 MOUNT ANALYSIS: TOWER ENGINEERING SOLUTIONS, LLC
 DATED: JUNE 28, 2021
 MOUNT MODIFICATION DESIGN: TOWER ENGINEERING SOLUTIONS, LLC
 DATED: JUNE 28, 2021
 RFDS REVISION: 1
 DATED: 1/20/2021
 ORDER ID: 548000
 REVISION: 0



PROJECT TEAM

A&E FIRM: 1100 E. WOODFIELD ROAD, SUITE 500
 SCHAMBURG, ILLINOIS 60173
 MILEN DIMITROV
 TEL: 847-908-8439
 EMAIL: mdimitrov@fullertonengineering.com
 CROWN CASTLE USA INC. DISTRICT CONTACTS:
 4301 HACIENDA DRIVE, SUITE 410
 PLEASANTON, CA 94588
 RYAN GROBMEIR - PROJECT MANAGER
 RYAN.GROBMEIR@CROWNCastle.COM
 TED CONGER - CONSTRUCTION MANAGER
 TED.CONGER@CROWNCastle.COM

CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

- NOTICE TO PROCEED-- NO WORK SHALL COMMENCE PRIOR TO CROWN CASTLE USA INC. WRITTEN NOTICE TO PROCEED (NTP) AND THE SUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN CASTLE USA INC. NOC AT 800-788-7011 & THE CROWN CASTLE USA INC. CONSTRUCTION MANAGER.
- "LOOK UP" - CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT:
THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.
- PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
- ALL CONSTRUCTION MEANS AND METHODS, INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE WORK CONTAINED HEREIN, AND SHALL MEET AND SHALL MEET ANSI/ASSE 110.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE 110.48 (LATEST EDITION) AND CROWN CASTLE USA INC. STANDARD CED--STD-10253, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA-322 (LATEST EDITION).
- ALL SITE WORK TO COMPLY WITH QAS--STD-10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE," CED--STD-10294 "STANDARD FOR INSTALLATION OF MOUNTS AND APPURTENANCES," AND LATEST VERSION OF ANSI/TIA-1019-A-2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS." IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
- ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
- CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, TOWER OWNER, CROWN CASTLE USA INC., AND/OR LOCAL UTILITIES.
- THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GREENFIELD GROUNDING NOTES:

- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
- THE CONTRACTOR SHALL PERFORM IEEE FALL-OF--POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
- THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
- METAL CONDUIT AND TRAY SHALL BE GROUNDING AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
- EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
- CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
- ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
- EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
- COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
- ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
- APPROVED ANTIOXIDANT COATINGS (I.E. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- BOND ALL METALLIC OBJECTS WITHIN 6 FT OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
- GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (I.E., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
- ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON-METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD--WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
- BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY).

GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION
CARRIER: VERIZON
TOWER OWNER: CROWN CASTLE USA INC.
- THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN IN THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
- THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.
- NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.
- SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.
- PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CROWN CASTLE.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND CROWN CASTLE PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
- CONTRACTOR IS TO PERFORM A SITE INVESTIGATION AND IS TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF CROWN CASTLE USA INC.
- CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
- UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90° AT TIME OF PLACEMENT.
- CONCRETE EXPOSED TO FREEZE--THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER--TO--CEMENT RATIO (W/C) OF 0.45.
- ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:
#4 BARS AND SMALLER..... 40 ksi
#5 BARS AND LARGER..... 60 ksi
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH..... 3"
CONCRETE EXPOSED TO EARTH OR WEATHER:
#6 BARS AND LARGER..... 2"
#5 BARS AND SMALLER..... 1-1/2"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
SLAB AND WALLS..... 3/4"
BEAMS AND COLUMNS..... 1-1/2"
- A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

ELECTRICAL INSTALLATION NOTES:

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
- CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
- WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
- EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR--CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
- ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (I.E. PANEL BOARD AND CIRCUIT ID'S).
- PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
- ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN--2, XHHW, XHHW--2, THW, THW--2, RHW, OR RHW--2 INSULATION UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN--2, XHHW, XHHW--2, THW, THW--2, RHW, OR RHW--2 INSULATION UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI--CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI--CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN--2, XHHW, XHHW--2, THW, THW--2, RHW, OR RHW--2 INSULATION UNLESS OTHERWISE SPECIFIED.
- ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP--STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEC AND NEC.
- ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- ELECTRICAL METALLIC TUBING (EMT) OR METAL--CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
- LIQUID--TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID--TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION--TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEC AND THE NEC.
- WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOULD SPECIMEN WIREWAY).
- SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
- CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON--PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (I.E. POWDER--ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
- EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY--COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3R (OR BETTER) FOR EXTERIOR LOCATIONS.
- METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY--COATED OR NON--CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECT (WP OR BETTER) FOR EXTERIOR LOCATIONS.
- NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
- THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR CROWN CASTLE USA INC. BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
- INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "VERIZON".
- ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

CONDUCTOR COLOR CODE		
SYSTEM	CONDUCTOR	COLOR
120/240V, 1Ø	A PHASE	BLACK
	B PHASE	RED
	NEUTRAL	WHITE
	GROUND	GREEN
120/208V, 3Ø	A PHASE	BLACK
	B PHASE	RED
	C PHASE	BLUE
	NEUTRAL	WHITE
277/480V, 3Ø	GROUND	GREEN
	A PHASE	BROWN
	B PHASE	ORANGE OR PURPLE
	C PHASE	YELLOW
DC VOLTAGE	NEUTRAL	GREY
	GROUND	GREEN
	POS (+)	RED**
	NEG (-)	BLACK**

APWA UNIFORM COLOR CODE:

- WHITE PROPOSED EXCAVATION
- PINK TEMPORARY SURVEY MARKINGS
- RED ELECTRIC POWER LINES, CABLES, CONDUIT, AND LIGHTING CABLES
- YELLOW GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS
- ORANGE COMMUNICATION, ALARM OR SIGNAL LINES, CABLES, OR CONDUIT AND TRAFFIC LOOPS
- BLUE POTABLE WATER
- PURPLE RECLAIMED WATER, IRRIGATION, AND SLURRY LINES
- GREEN SEWERS AND DRAIN LINES

* SEE NEC 210.5(C)(1) AND (2)
** POLARITY MARKED AT TERMINATION

ABBREVIATIONS:

- ANT ANTENNA
- (E) EXISTING
- FIF FACILITY INTERFACE FRAME
- GEN GENERATOR
- GPS GLOBAL POSITIONING SYSTEM
- GSM GLOBAL SYSTEM FOR MOBILE
- LTE LONG TERM EVOLUTION
- MGB MASTER GROUND BAR
- MW MICROWAVE
- (N) NEW
- NEC NATIONAL ELECTRIC CODE
- (P) PROPOSED
- PP POWER PLANT
- QTY QUANTITY
- RECT RECTIFIER
- RBS RADIO BASE STATION
- RET REMOTE ELECTRIC TILT
- RFDS RADIO FREQUENCY DATA SHEET
- RRH REMOTE RADIO HEAD
- RRU REMOTE RADIO UNIT
- SIAD SMART INTEGRATED DEVICE
- TMA TOWER MOUNTED AMPLIFIER
- TYP TYPICAL
- UMTS UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
- W.P. WORK POINT

JURISDICTIONAL APPROVAL:



VERIZON SITE NUMBER: 123825

BU #: 815876
SF POTRERO WEST
1431 SAN BRUNO AVENUE
SAN FRANCISCO, CA 94107
EXISTING 53'-0" MONOPOLE
2021.0060.0102

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	03/30/2021	LOI	PRELIMINARY	CJ
0	09/29/2021	SM	CONSTRUCTION	CJ
1	02/21/2022	CJ	CONSTRUCTION	CJ



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER:
T-2

REVISION:
1

SAN FRANCISCO FIRE DEPT CHECKLIST - PAGE 1 OF 2

2.06 PERMIT APPLICATION CHECKLIST FOR CELLULAR ANTENNA SITES AND ALL EQUIPMENT SERVING THE CELLULAR ANTENNA SITE

This checklist shall be printed on a drawing sheet and submitted as part of the plans submitted with any building permit application creating or modifying cellular antenna sites regardless of RF emission quantities. This checklist is designed to assist designers, installers, plan reviewers, and field inspectors. This checklist shall be prepared by the design professional and shall be stamped and wet-signed.

This document is not all-inclusive of all requirements for cellular antenna sites and it is the responsibility of the designer to research the applicable codes. Documents referenced for this bulletin are as follows:

- FCC OET Bulletin 56 - Questions and Answers about Biological Effects and Potential Hazards of Radiofrequency Electromagnetic Fields (August 1999)
- FCC OET Bulletin 65 - Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (Ed. 97-01:August 1997)
- FCC - A Local Government Official's Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance (June 2, 2000)
- 2019 California Building Code (2019 CBC)
- 2019 California Fire Code (2019 CFC)
- 2019 California Mechanical Code (2019 CMC)
- 2019 San Francisco Fire Code (2019 SFFC)
- 2016 NFPA 13 Automatic Sprinkler Systems
- 2016 NFPA 72 National Fire Alarm Code

- COMPLETE
SEE T-1
1. Provide a description of work on the plans.
- COMPLETE
SEE A-1 THRU A-5
2. Plans shall include plan views and elevations showing all equipment locations and cable runs.
- COMPLETE
SEE A-6
3. Plans shall include antenna cut-sheets and list on a drawing sheet.
- COMPLETE
SEE T-3
4. Include a copy of the signed and stamped RF report on a drawing sheet as a reference to identify the exclusion area required to prevent occupational exposures in excess of the FCC guidelines (47CFR1.1310 and FCC OET Bulletin 65 edition 97-01).
- COMPLETE
SEE T-3
5. The RF report shall indicate whether or not the site under review is a part of a multiple transmitter site and shall show compliance with FCC 47CFR1.1307(b)(3), as amended, all transmitters shall not exceed 5% of the power density exposure limit.
- COMPLETE
SEE A-1
6. Drawings shall reflect the striped/exclusion areas per the above RF Report with a minimum radius being 1 foot.

SAN FRANCISCO FIRE DEPT CHECKLIST - PAGE 2 OF 2

- COMPLETE
SEE T-3
7. Plans shall include a quantitative three dimensional image of the RF levels from each antenna located near an egress point (e.g. penthouse stair, fire escape, roof walking paths, skylights, etc.)
- COMPLETE
SEE T-4
8. "Notice to Workers" warning signage as applicable per the above RF Report shall be permanently mounted at the stairwell side of the roof-access door (ANSI C95.2-1982(Reference [3])-yellow or more durable color for outdoor longevity).
- COMPLETE
SEE A-1
9. Camouflaged antennas shall have 4inch x 4inch signage permanently mounted to the exterior of the RF screen as provided below. The sign shall be weatherproof with contrasting background color and shall contain the yellow triangle around the antenna symbol (see ANSI C95.2-1982(Reference [3])-yellow or more durable color for outdoor longevity). Signage locations(s) and detail of the sign shall be included on the plans.
- COMPLETE
10. Cables/wiring shall not be allowed in exit enclosures, smoke-proof towers, elevator shafts, or in front of dry standpipes. 2013 CFC 1022.5 and 509.2
- COMPLETE
11. Antennas shall not be mounted closer than the exclusion zone plus 4 feet for installations near fire escapes, stair penthouse doors, exterior standpipe outlets, skylights, or other fire department operations considerations.
- COMPLETE
12. There is no guarantee that the fire department will not shutdown the power to the site in an emergency situation although in order to reduce the site operator's possible loss of service the following information may be provided at the equipment room entrance:

Provide emergency shutdown procedure signage. The sign shall include the following:

* Emergency 24 hour/7 day a week NOC / field technician telephone number for RF shutdown.
* Cell site identification number.
* Map to location of electrical main-electrical main shall be clearly identified with a permanent red label and white lettering.
* Map to location of battery cabinets and breakers-cabinets and breakers shall be clearly identified with a permanent red label and white lettering.
* Any other relevant information or procedures as required for the individual cellular site.
* The sign shall be clearly labeled in a phenolic label with a white background and black lettering. The title block shall be a red background and 1" high white lettering. Multiple signs may need to be installed based upon the cellular site configuration.
* The actual breaker(s) shall be a phenolic label (red background and white lettering) with lettering not less than 1/8" high.
* A copy of the signage shall be included on a drawing sheet.

Prepared by: MICHAEL B. LEEPER, P.E.
(Please include professional title and stamp)

Firm Name: FULLERTON ENGINEERING CONSULTANTS
Address: 1100 WOODFIELD RD, SUITE #500
SCHAUMBURG, IL 60173

Phone Number: (847) 908-8400

For further information see the FCC website: <http://www.fcc.gov/oet/rfsafety>
or contact the
San Francisco Fire Department
1660 Mission Street, 4th Floor
San Francisco, CA 94103
(415) 558-6187

JURISDICTIONAL APPROVAL:



VERIZON SITE NUMBER: 123825

BU #: 815876
SF POTRERO WEST
1431 SAN BRUNO AVENUE
SAN FRANCISCO, CA 94107
EXISTING 53'-0" MONOPOLE
2021.0060.0102

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	05/30/2021	LOI	PRELIMINARY	CJ
0	09/29/2021	SM	CONSTRUCTION	CJ
1	02/21/2022	CJ	CONSTRUCTION	CJ



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SHEET NUMBER: T-3
REVISION: 1

PROPOSED BATTERIES:
 NEW BATTERY TYPE: N/A
 NUMBER OF UNITS W/ NEW BATTERIES: 0
 NUMBER OF NEW BATTERIES: 0
 MATERIAL: N/A VOLUME: N/A BATTERY TOTAL: N/A

NOTES:

- A SEPARATE PERMIT SHALL BE REQUIRED FROM S.F.F.D. IF BATTERY ELECTROLYTE EXCEEDS 50 GALLONS.
- THERE IS AN EXISTING GENERATOR ON SITE.

SITE PLAN DISCLAIMER:
 PROPERTY LINES AND STRUCTURES HAVE BEEN DIGITIZED FROM PREVIOUS PLAN SETS. CROWN CASTLE USA INC. HAS NOT COMPLETED A SITE SURVEY AND THEREFORE MAKES NO CLAIMS AS TO THE ACCURACY OF INFORMATION DEPICTED ON THIS SHEET.

JURISDICTIONAL APPROVAL:

verizon
 3245 158TH AVENUE MS 231
 BELLEVUE, WA 98008

CROWN CASTLE
 1505 WESTLAKE AVENUE NORTH, SUITE 800
 SEATTLE, WA 98109

FULLERTON
 ENGINEERING · DESIGN
 1100 E. WOODFIELD ROAD, SUITE 500
 SCHAUMBURG, ILLINOIS 60173

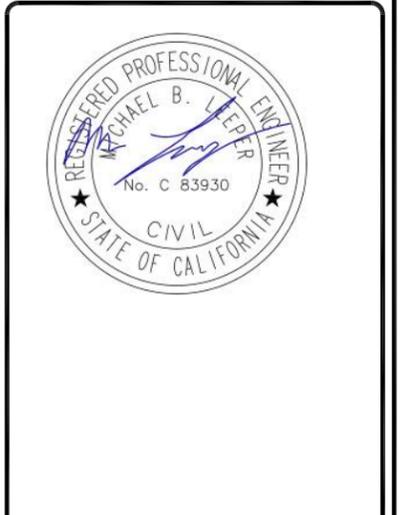
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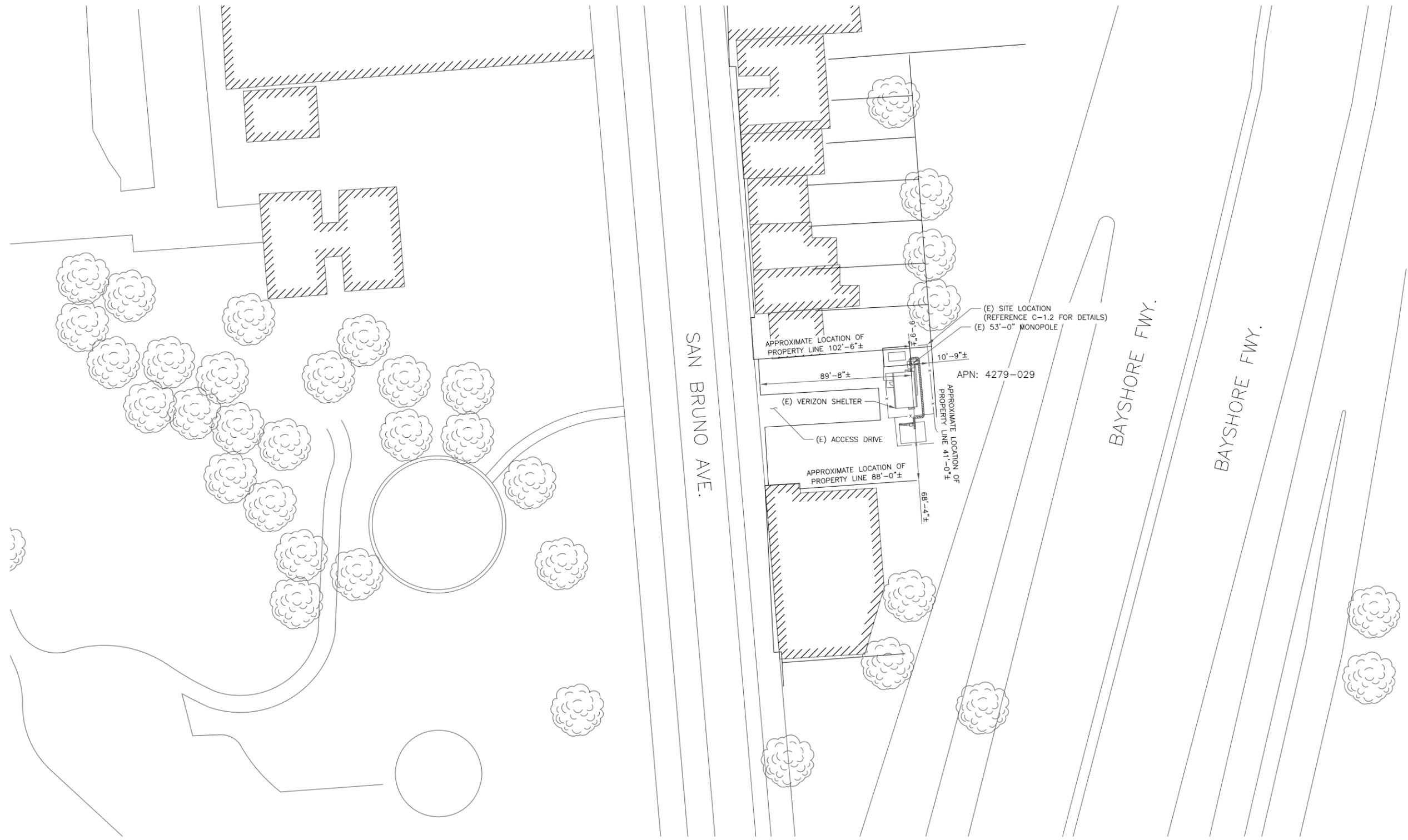
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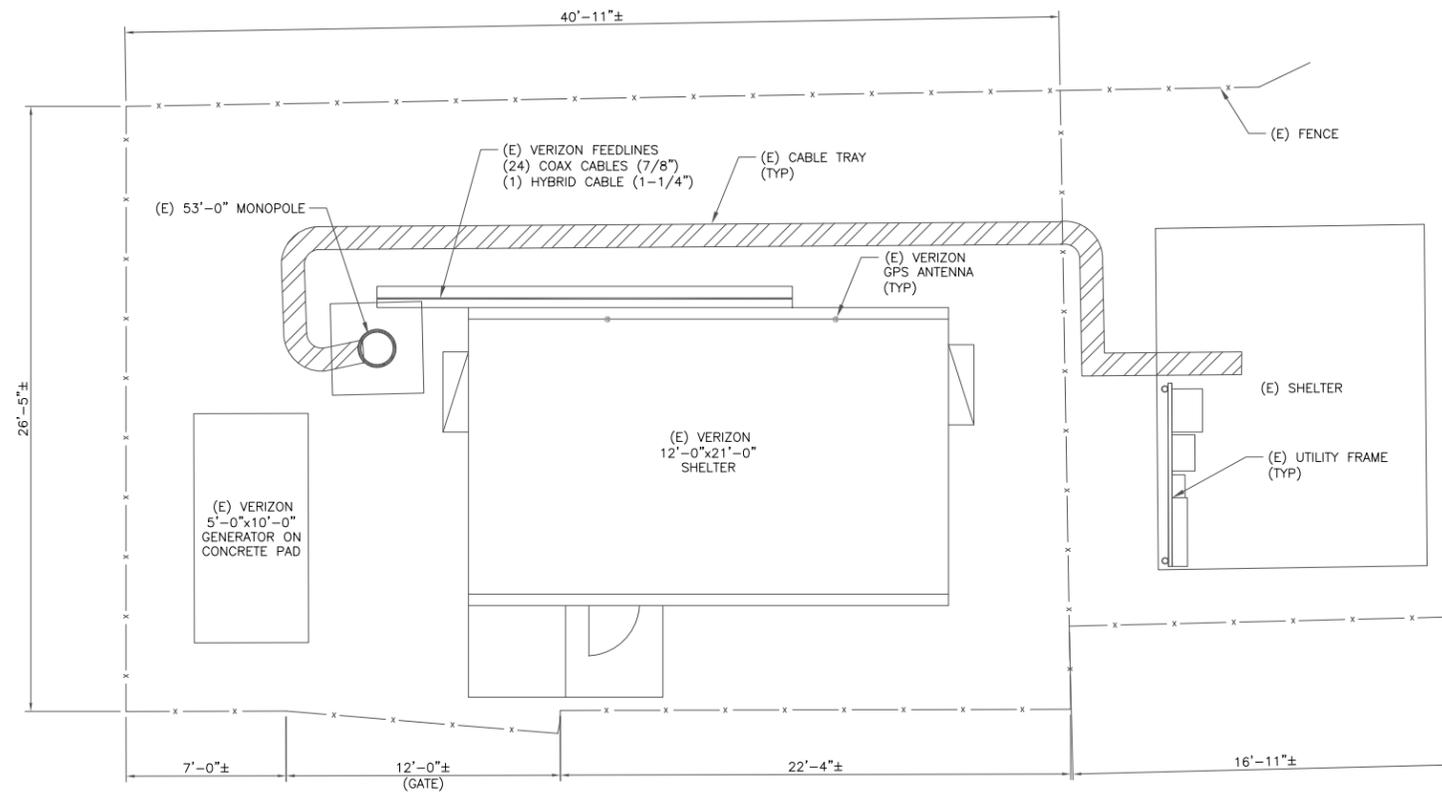


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SHEET NUMBER: **C-1.1** REVISION: **1**



1 OVERALL SITE PLAN
 SCALE: 1"=30'-0" (FULL SIZE)
 1"=60'-0" (11x17)



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1505 WESTLAKE AVENUE NORTH, SUITE 800
SEATTLE, WA 98109



1100 E. WOODFIELD ROAD, SUITE 500
SCHAUMBURG, ILLINOIS 60173

VERIZON SITE NUMBER: 123825

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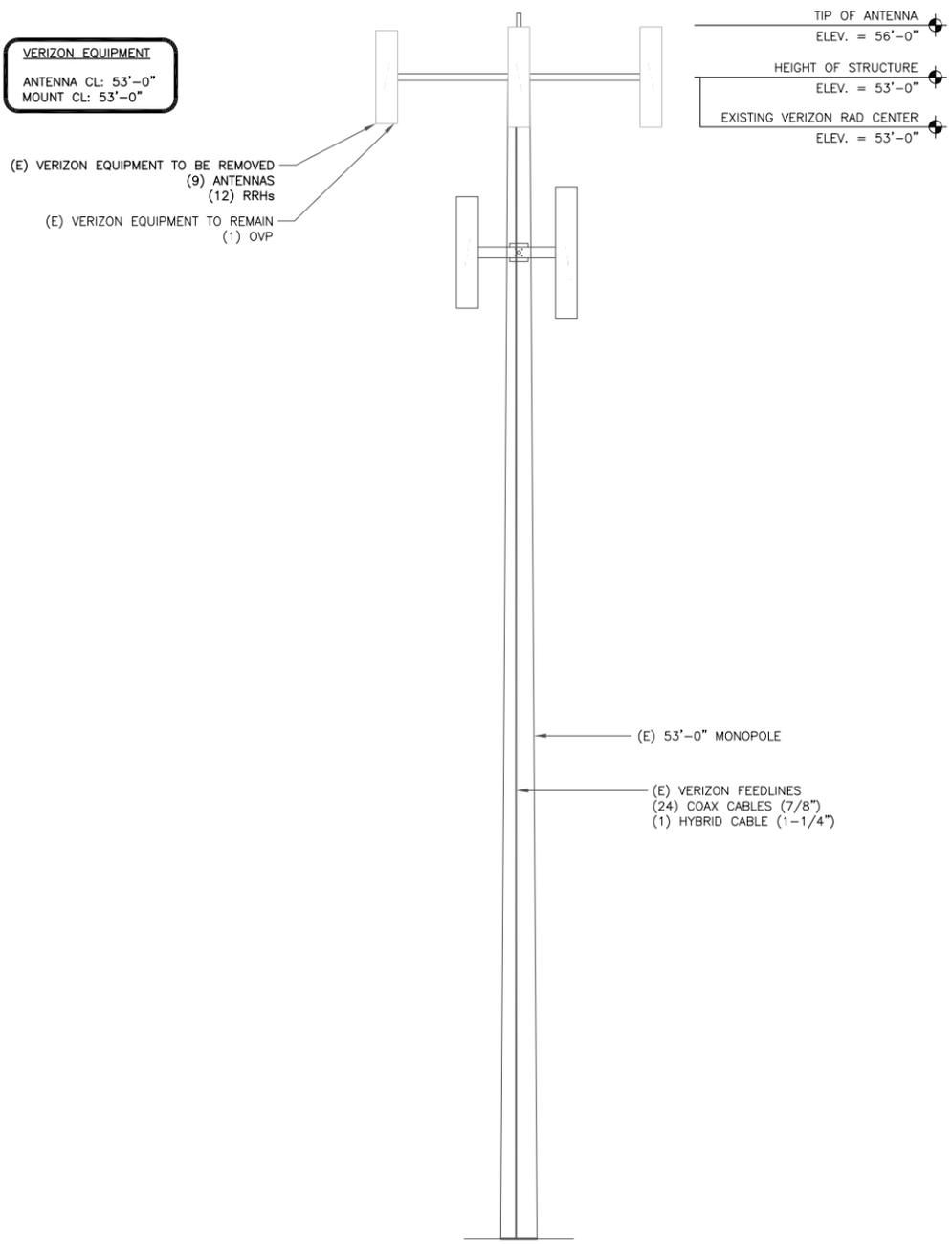
SHEET NUMBER: REVISION:

C-1.2 **1**

1 SITE PLAN
SCALE: 1/4"=1'-0" (FULL SIZE)
1/8"=1'-0" (11x17)

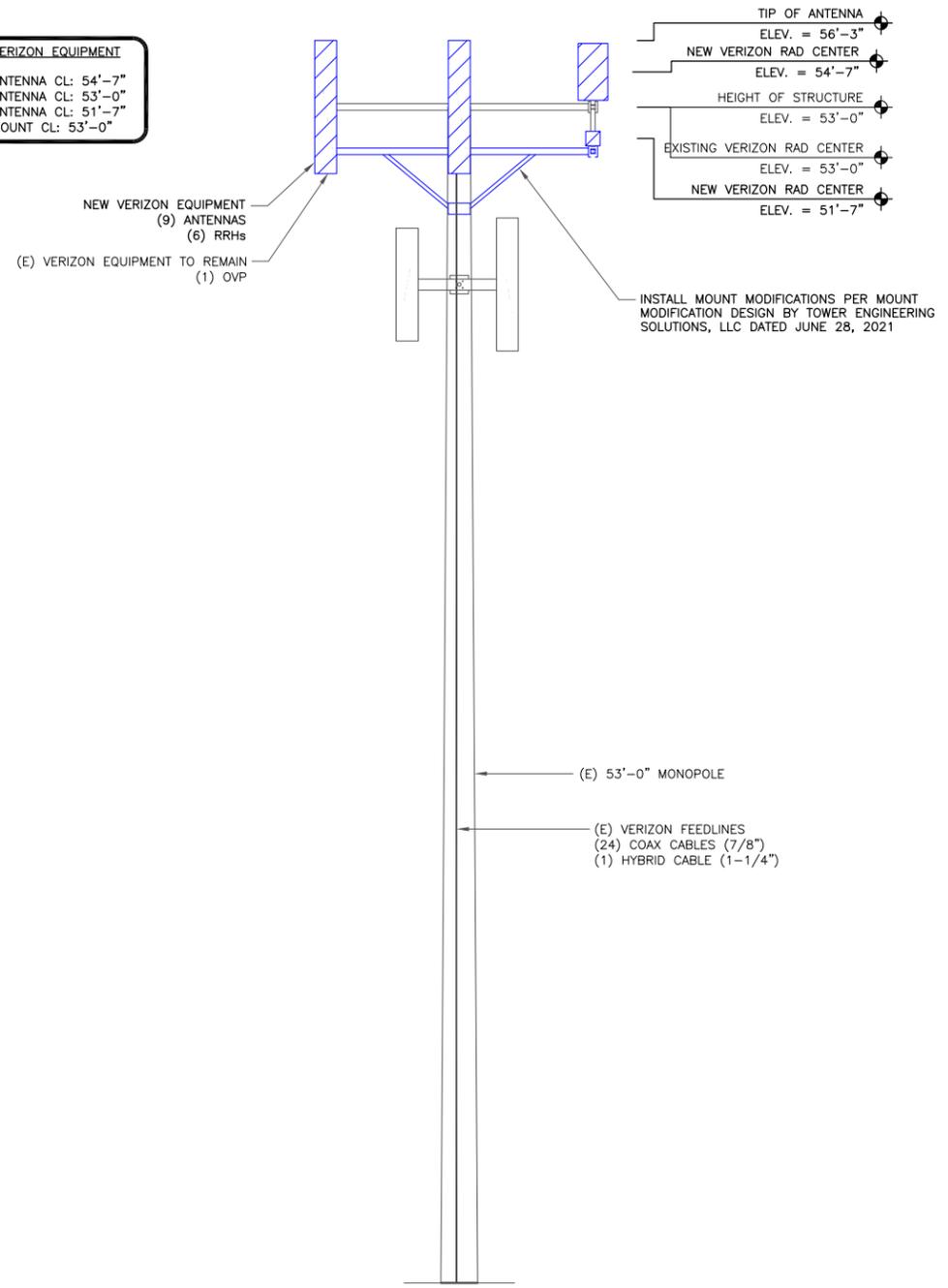


VERIZON EQUIPMENT
 ANTENNA CL: 53'-0"
 MOUNT CL: 53'-0"



1 EXISTING EAST ELEVATION
 SCALE: NOT TO SCALE

VERIZON EQUIPMENT
 ANTENNA CL: 54'-7"
 ANTENNA CL: 53'-0"
 ANTENNA CL: 51'-7"
 MOUNT CL: 53'-0"



2 FINAL EAST ELEVATION
 SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:



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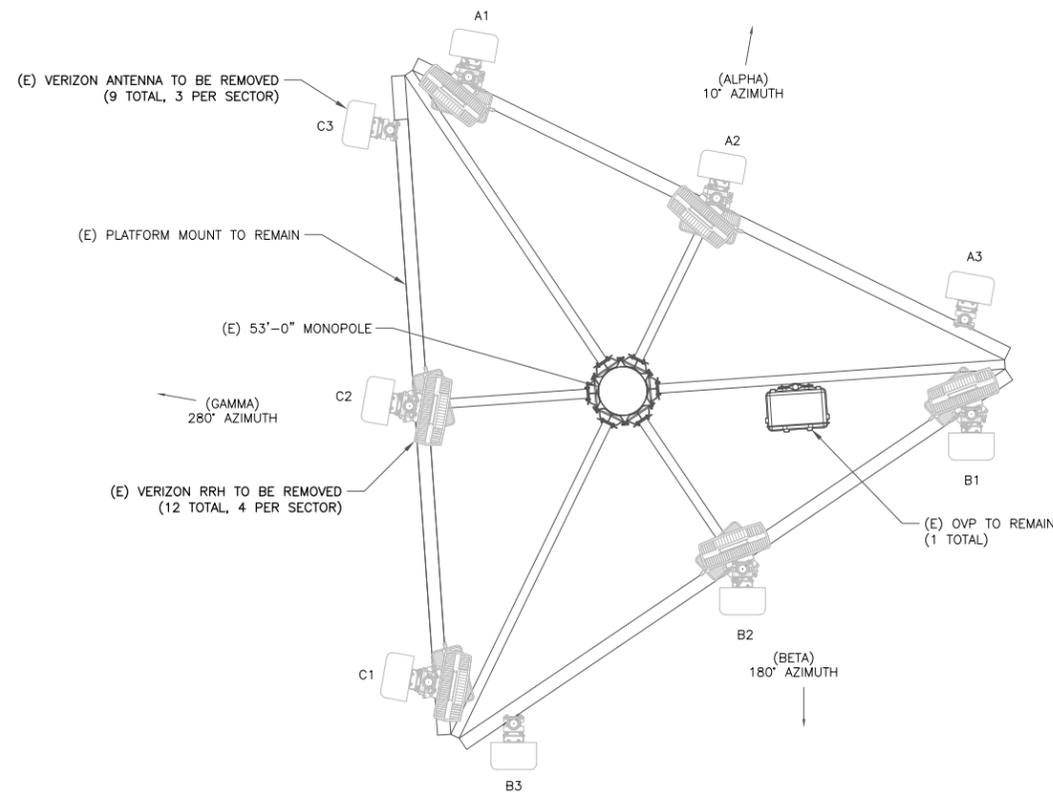
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SHEET NUMBER: **C-2** REVISION: **1**

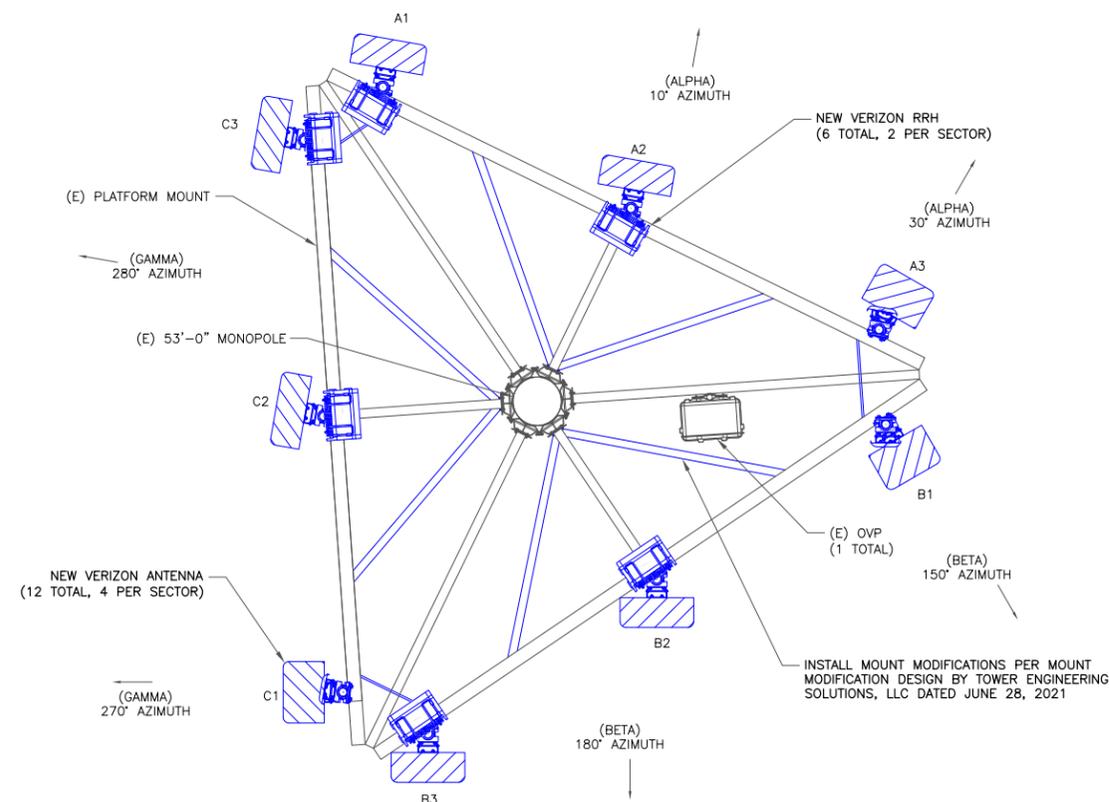
ANTENNA SCHEDULE										
SECTOR	POS.	TECHNOLOGY	RAD CENTER	AZIMUTH	ANTENNA MANUFACTURER	ANTENNA MODEL	MECH. TILT	ELECT. TILT	TOWER MOUNTED EQUIPMENT	FEEDLINE TYPE
ALPHA	A1	CDMA/LTE/5G	53'-0"	10°	COMMSCOPE	NNHH-65B-R4	0°	2'	(1) ERICSSON - 4449	HYBRID
ALPHA	A2	CDMA/LTE/5G	53'-0"	10°	COMMSCOPE	NNHH-65B-R4	0°	2'	(1) ERICSSON - 8843	HYBRID
ALPHA	A3	LTE LTE	54'-7" 51'-7"	30° 10°	TBD ERICSSON	NL-SUB6 ANTENNA KRE105281/1	0° 0°	3' 8'	-	HYBRID
BETA	B1	LTE LTE	54'-7" 51'-7"	150° 180°	TBD ERICSSON	NL-SUB6 ANTENNA KRE105281/1	0° 0°	3' 8'	(1) OVP	HYBRID
BETA	B2	CDMA/LTE/5G	53'-0"	180°	COMMSCOPE	NNHH-65B-R4	0°	2'	(1) ERICSSON - 4449	HYBRID
BETA	B3	CDMA/LTE/5G	53'-0"	180°	COMMSCOPE	NNHH-65B-R4	0°	2'	(1) ERICSSON - 8843	HYBRID
GAMMA	C1	LTE LTE	54'-7" 51'-7"	270° 280°	TBD ERICSSON	NL-SUB6 ANTENNA KRE105281/1	0° 0°	3' 8'	-	HYBRID
GAMMA	C2	CDMA/LTE/5G	53'-0"	280°	COMMSCOPE	NNHH-65B-R4	0°	2'	(1) ERICSSON - 4449	HYBRID
GAMMA	C3	CDMA/LTE/5G	53'-0"	280°	COMMSCOPE	NNHH-65B-R4	0°	2'	(1) ERICSSON - 8843	HYBRID

CABLE SCHEDULE			
STATUS	CABLE TYPE	SIZE	QUANTITY
EXISTING	COAX	7/8"	24
EXISTING	HYBRID	1-1/4"	1
FINAL CABLE QUANTITY			25

1 ANTENNA AND CABLE SCHEDULE
SCALE: NOT TO SCALE



2 EXISTING ANTENNA PLAN
SCALE: NOT TO SCALE



3 FINAL ANTENNA PLAN
SCALE: NOT TO SCALE



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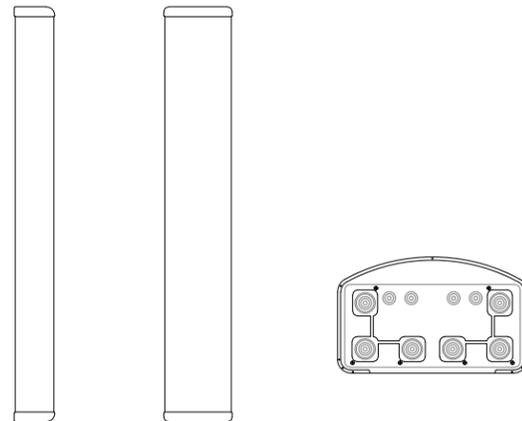
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SHEET NUMBER: **C-3** REVISION: **1**



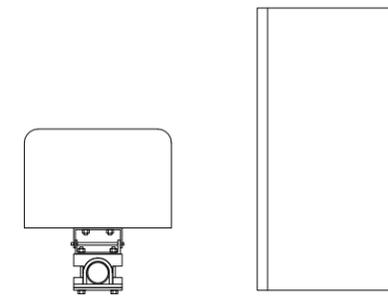
ERICSSON - KRE105281/1
WEIGHT: 1.76 LBS
SIZE (HxWxD): 7.87x7.87x0.98 IN.

1 ERICSSON - KRE105281/1
SCALE: NOT TO SCALE



COMMSCOPE - NHH-65B-R2B
WEIGHT (WITHOUT MOUNTING HARDWARE): 43.7 LBS
SIZE (HxWxD): 72.0x11.9x7.1 IN.
MOUNTING KIT: BSAMNT-3 (2.375" O.D. TO 4.5" O.D. MOUNTING PIPE)

2 COMMSCOPE - NHH-65B-R2B
SCALE: NOT TO SCALE

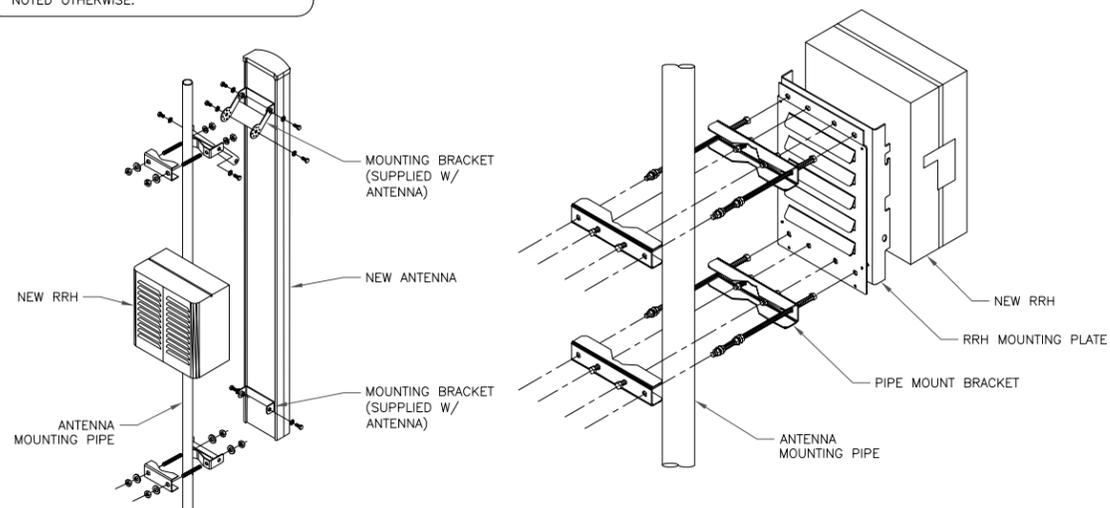


VZW - NL-SUB-6
WEIGHT: 88.0 LBS
SIZE (HxWxD): 30.8x16.1x10.8 IN.

3 VZW - NL-SUB-6
SCALE: NOT TO SCALE

INSTALLER NOTES:

1. COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRHs RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING.
2. DO NOT OPEN RRH PACKAGES IN THE RAIN.
3. ALL PIPES, BRACKETS, AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.



5 ANTENNA WITH RRH MOUNTING DETAIL
SCALE: NOT TO SCALE

4 NOT USED
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:

verizon

3245 158TH AVENUE MS 231
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CROWN CASTLE

1505 WESTLAKE AVENUE NORTH, SUITE 800
SEATTLE, WA 98109

FULLERTON
ENGINEERING · DESIGN

1100 E. WOODFIELD ROAD, SUITE 500
SCHAMBURG, ILLINOIS 60173

VERIZON SITE NUMBER: 123825

BU #: 815876
SF POTRERO WEST
1431 SAN BRUNO AVENUE
SAN FRANCISCO, CA 94107
EXISTING 53'-0" MONOPOLE
2021.0060.0102

ISSUED FOR:

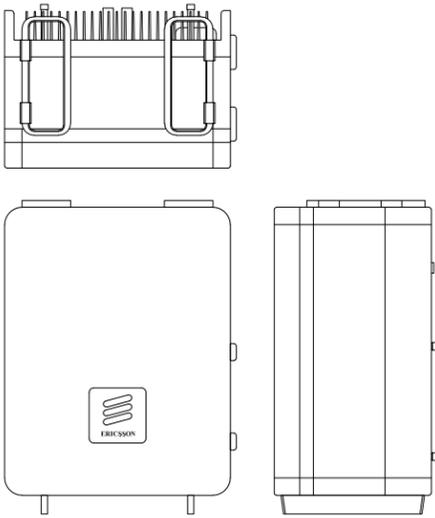
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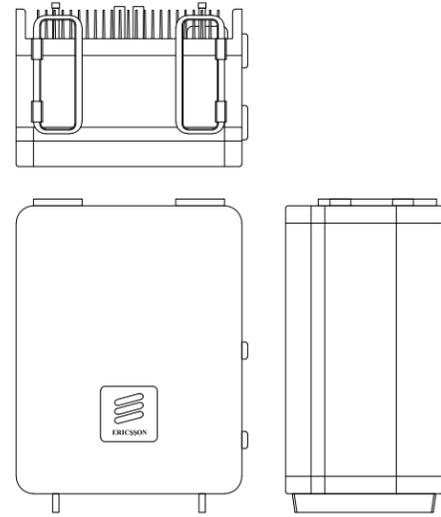
SHEET NUMBER:
C-4.1

REVISION:
1



ERICSSON - RADIO 8843
WEIGHT: 70.0 LBS
SIZE (HxWxD): 18.0x13.2x9.4 IN.

1 ERICSSON - RADIO 8843
SCALE: NOT TO SCALE



ERICSSON - RADIO 4449
WEIGHT: 70.0 LBS
SIZE (HxWxD): 18.0x13.2x9.4 IN.

2 ERICSSON - RADIO 4449
SCALE: NOT TO SCALE

3 NOT USED
SCALE: NOT TO SCALE

4 NOT USED
SCALE: NOT TO SCALE

5 NOT USED
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:

verizon
3245 158TH AVENUE MS 231
BELLEVUE, WA 98008

CROWN CASTLE
1505 WESTLAKE AVENUE NORTH, SUITE 800
SEATTLE, WA 98109

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SHEET NUMBER: **C-4.2** REVISION: **1**

Antenna Summary

Added

700	850	1900	AWS	AWS3	28 GHz	31 GHz	39 GHz	CBRS	LAA	L-Sub	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity
LTE	CDMA LTE 5G	LTE	LTE	LTE							COMMSCOPE	NNHH-65B-R4	53	56	10(0001) 10(01) 180(0002) 180(02) 280(0003) 280(03)	false	false	PHYSICAL	6
								LTE			ERICSSON	KRE105281/1	51.7	52	10(00) 180(00) 280(00)	false	false	PHYSICAL	0
											TBD	nL-Sub6 Antenna	54.7	56	30(0001) 150(0002) 270(0003)	false	false	PHYSICAL	3

Removed

700	850	1900	AWS	AWS3	28 GHz	31 GHz	39 GHz	CBRS	LAA	L-Sub	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity
	CDMA										COMMSCOPE	LBX-6513DS-VTM	53	55.1	10(01) 180(02) 280(03)	false	false	PHYSICAL	3
LTE	LTE 5G	LTE	LTE	LTE							COMMSCOPE	SBNHH-1D65A	53	55.3	10(0001) 10(01) 180(0002) 180(02) 280(0003) 280(03)	false	false	PHYSICAL	6

Retained

700	850	1900	AWS	AWS3	28 GHz	31 GHz	39 GHz	CBRS	LAA	L-Sub	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity
No data available.																			

Added: 9 Removed: 9 Retained: 0

Equipment Summary

Added

Equipment Type	Location	700	850	1900	AWS	AWS3	28 GH	31 GHz	39 GH	CBRS	LAA	L-Sub	Make	Model	Cable Length	Cable Size	Install Type	Quantity
RRU	Tower												Ericsson	4408 B48 DC			PHYSICAL	3
RRU	Tower		LTE 5G										Ericsson	4449			PHYSICAL	3
RRU	Tower			LTE	LTE	LTE							Ericsson	8843			PHYSICAL	3
RRU	Tower											5G	Ericsson	VZE01			PHYSICAL	0

Removed

Equipment Type	Location	700	850	1900	AWS	AWS3	28 GH	31 GHz	39 GH	CBRS	LAA	L-Sub	Make	Model	Cable Length	Cable Size	Install Type	Quantity
RRU	Tower		LTE 5G										Ericsson	2212 B5			PHYSICAL	3
RRU	Tower			LTE									Ericsson	RRUS32 B2			PHYSICAL	3
RRU	Tower				LTE	LTE							Ericsson	RRUS32 B66A			PHYSICAL	3
RRU	Tower		LTE										Ericsson	RUL01 B13			PHYSICAL	3

Retained

Equipment Type	Location	700	850	1900	AWS	AWS3	28 GH	31 GHz	39 GH	CBRS	LAA	L-Sub	Make	Model	Cable Length	Cable Size	Install Type	Quantity
No data available.																		

JURISDICTIONAL APPROVAL:

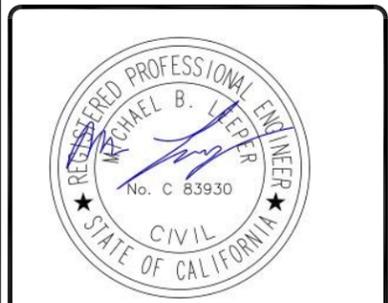


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SHEET NUMBER: **C-5** REVISION: **1**

PENDING PLUMBING DIAGRAM

JURISDICTIONAL APPROVAL:

verizon
3245 158TH AVENUE MS 231
BELLEVUE, WA 98008

CROWN CASTLE
1505 WESTLAKE AVENUE NORTH, SUITE 800
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1 CONFIGURATION DIAGRAM
SCALE: NOT TO SCALE

SHEET NUMBER:
C-6

REVISION:
1

SIGNAGE AND STRIPING NOTES:

1. THE FOLLOWING INFORMATION IS A GUIDELINE WITH RESPECT TO PREVAILING STANDARDS LIMITING HUMAN EXPOSURE TO RADIO FREQUENCY ENERGY AND SHOULD BE USED AS SUCH. IF THE SITE'S EMF REPORT OR ANY LOCAL, STATE, OR FEDERAL GUIDELINES OR REGULATION SHOULD BE IN CONFLICT WITH ANY PART OF THESE NOTES OR PLANS, THE MORE RESTRICTIVE GUIDELINE OR REGULATION SHALL BE FOLLOWED AND OVERRIDE THE LESSER.
2. IF THE BOTTOM OF THE ANTENNA IS MOUNTED (8) EIGHT FEET ABOVE THE GROUND OR ROOF LINE OF THE PERSONAL COMMUNICATION SYSTEM (PCS) AND DOES NOT EXCEED THE PUBLIC LIMIT OF RF EXPOSURE LIMIT THEN NO STRIPING OR BARRICADES SHOULD BE NEEDED.
3. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (E.G. ROOF ACCESS DOOR CANNOT BE LOCKED OR THERE IS AN EXISTING FIRE EGRESS), THEN BOTH BARRICADES AND STRIPING WILL BE NEEDED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES AND STRIPING WILL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER THE CONSTRUCTION OF THE SITE. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.
4. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS NOT EXCEEDED AND THE AREA IS NOT PUBLICLY ACCESSIBLE (E.G. ROOF ACCESS DOOR IS LOCKED), THEN JUST STRIPING OUT TO THE PUBLIC LIMIT WILL BE NEEDED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE STRIPING WILL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER THE CONSTRUCTION OF THE SITE. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH STRIPING.
5. PHOTOS OF ALL STRIPING, BARRICADES, AND SIGNAGE WILL BE PART OF THE CONTRACTOR'S CLOSE OUT PACKAGE AND WILL BE TURNED INTO THE PROJECT CONSTRUCTION MANAGER AT THE END OF CONSTRUCTION. STRIPING SHALL BE DONE WITH FADE RESISTANT YELLOW SAFETY PAINT IN A CROSS HATCH PATTERN. ALL BARRICADES SHALL BE MADE OF AN RF FRIENDLY MATERIAL SO THAT THEY DO NOT BLOCK OR INTERFERE WITH THE OPERATION OF THE SITE AND SHALL BE PAINTED WITH FADE RESISTANT YELLOW SAFETY PAINT. THE CONTRACTOR SHALL PROVIDE ALL RF FRIENDLY BARRICADES NEEDED AND SHALL PROVIDE THE CONSTRUCTION MANAGER WITH A DETAILED SHOP DRAWING OF EACH BARRICADE.
6. ALL REQUIRED SIGNAGE WILL BE INSTALLED AS NEEDED AND FIELD VERIFIED.

NOTICE
GUIDELINES FOR WORKING IN
RADIOFREQUENCY ENVIRONMENTS

-  All personnel should have electromagnetic energy (EME) awareness training
-  All personnel entering this site must be authorized
-  Obey all posted signs
-  Assume all antennas are active
-  Before working on antennas, notify owners and disable appropriate transmitters
-  Maintain minimum 3 feet clearance from all antennas
-  Do not stop in front of antennas
-  Use personal RF monitors while working near antennas
-  Never operate transmitters without shields during normal operation
-  Do not operate base station antennas in equipment room.

1 RF GUIDELINES SIGN
SCALE: NOT TO SCALE

Beyond this point:
Radio frequency fields at this site
may exceed FCC rules for human
exposure.

For your safety, obey all posted signs and site guidelines for working in radio frequency environments.

In accordance with Federal Communications Commission rules on radio frequency emissions 47 CFR 1.1307(b)

2 RF CAUTION SIGN
SCALE: NOT TO SCALE

EMERGENCY SHUT DOWN

FOR IMMEDIATE SHUT DOWN OF ALL RADIO FREQUENCY EMISSIONS OF THIS SITE,

- 1) CALL CONTACT NUMBER AND GIVE SITE IDENTIFICATION NO.

CONTACT PHONE NUMBER: 1-800-788-7011
SITE IDENTIFICATION NUMBER: 815876
- 2) DISCONNECT POWER AT MAIN SERVICE DISCONNECT:

(CONTRACTOR TO SUBMIT PROPOSED WRITTEN DIRECTIONS FOR EACH OF (2) SIGNS TO PROJECT CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO ORDERING SIGNS)
- 3) DISCONNECT BACK-UP POWER AT BATTERY DISCONNECT:

(CONTRACTOR TO SUBMIT PROPOSED WRITTEN DIRECTIONS FOR EACH OF (2) SIGNS TO PROJECT CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO ORDERING SIGNS)

- SIGN SHALL BE A PHENOLIC LABEL WITH WHITE BACKGROUND AND BLACK LETTERING. THE TITLE BLOCK SHALL BE A RED BACKGROUND AND 1" HIGH WHITE LETTERING.
- SIGN SHALL BE PERMANENTLY MOUNTED AT THE FOLLOWING LOCATIONS:
 - BATTERY LOCATION WITHIN PROXIMITY OF BATTERY DISCONNECT
 - THE CELL SITE MAIN DISCONNECT

3 EMERGENCY SHUT DOWN SIGN
SCALE: NOT TO SCALE

NOTICE



Radio frequency fields beyond this point may exceed the FCC general public exposure limit.

Obey all posted signs and site guidelines for working in radio frequency environments.

In accordance with Federal Communications Commission rules on radio frequency emissions 47 CFR 1.1307(b)

4 RF NOTICE SIGN
SCALE: NOT TO SCALE

WARNING



Beyond this point:
Radio frequency fields at this site
exceed the FCC rules for human
exposure.

Failure to obey all posted signs and site guidelines for working in radio frequency environments could result in serious injury.

In accordance with Federal Communications Commission rules on radio frequency emissions 47 CFR 1.1307(b)

5 RF WARNING SIGN
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:

verizon
3245 158TH AVENUE MS 231
BELLEVUE, WA 98008

CROWN CASTLE
1505 WESTLAKE AVENUE NORTH, SUITE 800
SEATTLE, WA 98109

FULLERTON
ENGINEERING · DESIGN
1100 E. WOODFIELD ROAD, SUITE 500
SCHAUMBURG, ILLINOIS 60173

VERIZON SITE NUMBER: 123825

BU #: 815876
SF POTRERO WEST
1431 SAN BRUNO AVENUE
SAN FRANCISCO, CA 94107
EXISTING 53'-0" MONOPOLE
2021.0060.0102

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	05/30/2021	LOI	PRELIMINARY	CJ
0	09/29/2021	SM	CONSTRUCTION	CJ
1	02/21/2022	CJ	CONSTRUCTION	CJ



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SHEET NUMBER: **C-7** REVISION: **1**

JURISDICTIONAL APPROVAL:

verizon

3245 158TH AVENUE MS 231
BELLEVUE, WA 98008

CROWN CASTLE

1505 WESTLAKE AVENUE NORTH, SUITE 800
SEATTLE, WA 98109

FULLERTON
ENGINEERING · DESIGN

1100 E. WOODFIELD ROAD, SUITE 500
SCHAUMBURG, ILLINOIS 60173

VERIZON SITE NUMBER: 123825

BU #: 815876
SF POTRERO WEST
1431 SAN BRUNO AVENUE
SAN FRANCISCO, CA 94107
EXISTING 53'-0" MONOPOLE
2021.0060.0102

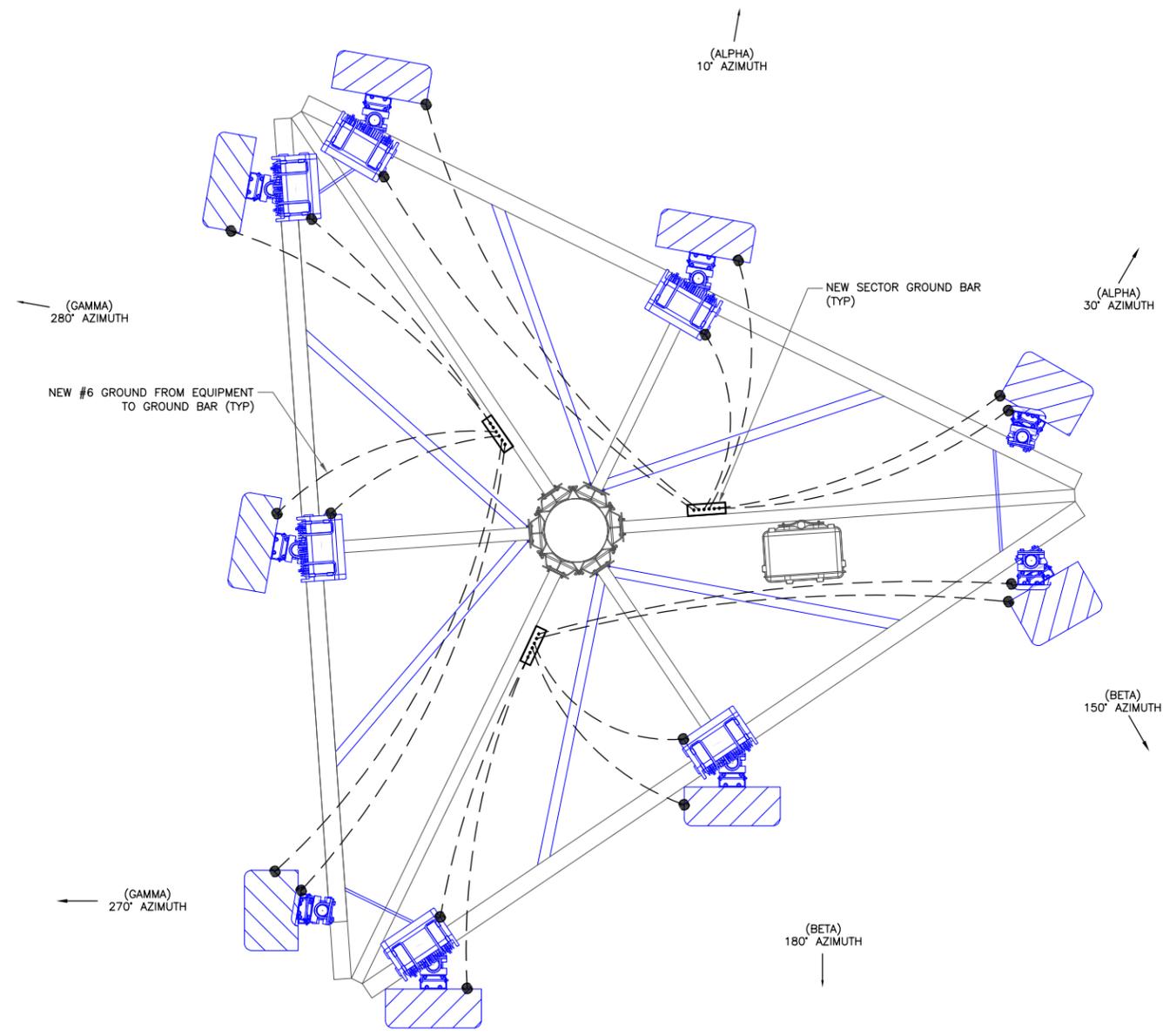
ISSUED FOR:

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0	09/29/2021	SM	CONSTRUCTION	CJ
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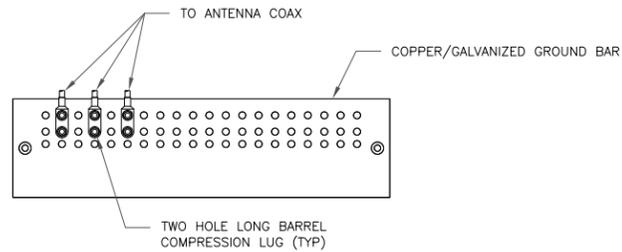
SHEET NUMBER: **G-1** REVISION: **1**



GROUNDING LEGEND

- #6 STRANDED & INSULATED
- GROUND BUS BAR
- MECHANICAL CONNECTION

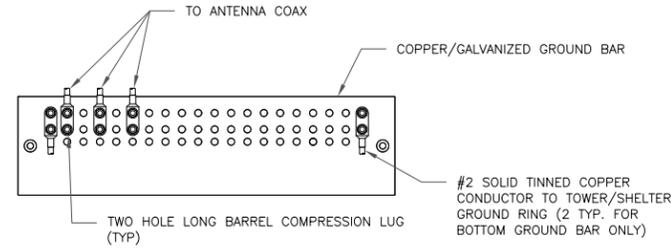
1 ANTENNA GROUNDING PLAN
SCALE: NOT TO SCALE



NOTES:

- DOUBLING UP "OR STACKING" OF CONNECTIONS IS NOT PERMITTED.
- EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
- GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO ANTENNA MOUNT STEEL.

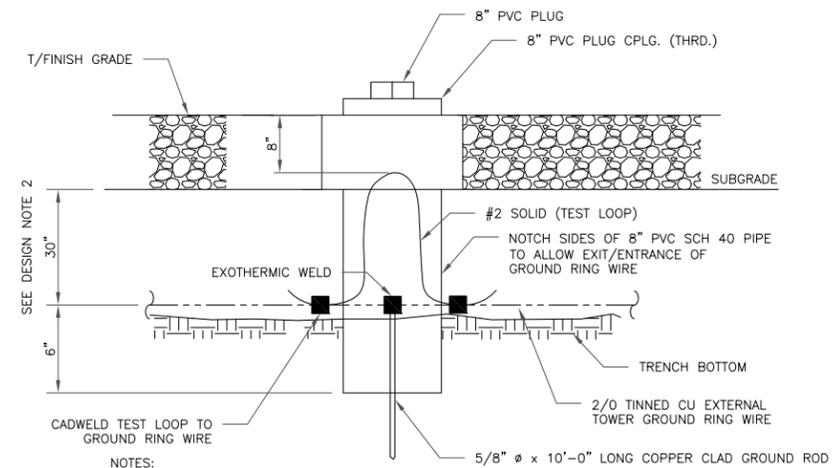
1 ANTENNA SECTOR GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

- EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
- GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
- GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.

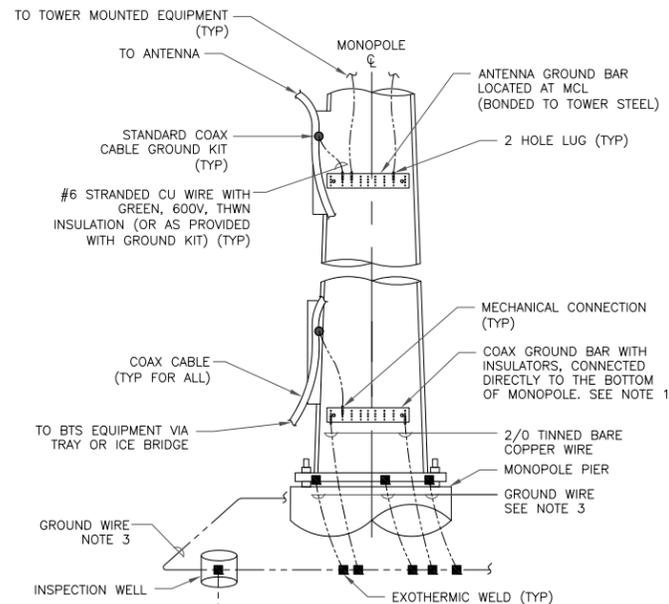
2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

- GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL.
- GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

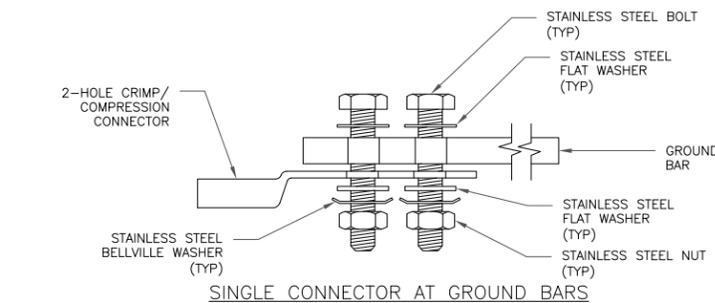
3 INSPECTION WELL DETAIL
SCALE: NOT TO SCALE



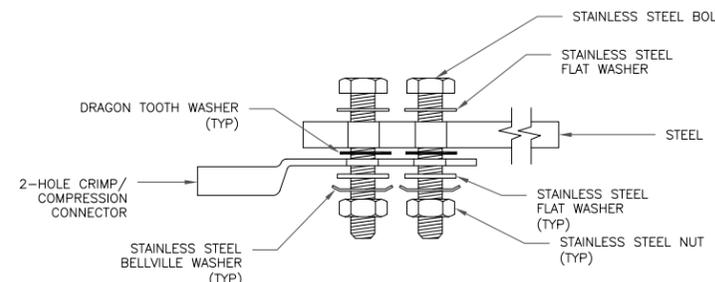
NOTES:

- NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATIONS AND CONNECTION ORIENTATION. COAXIAL CABLES EXCEEDING 200 FEET ON THE TOWER SHALL HAVE GROUND KITS AT THE MIDPOINT. PROVIDE AS REQUIRED.
- ONLY MECHANICAL CONNECTIONS ARE ALLOWED TO BE MADE TO CROWN CASTLE USA INC. TOWERS. ALL MECHANICAL CONNECTIONS SHALL BE TREATED WITH AN ANTI-OXIDANT COATING.
- ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF THE RECOGNIZED EDITION OF ANSI/TIA 222 AND NFPA 780.

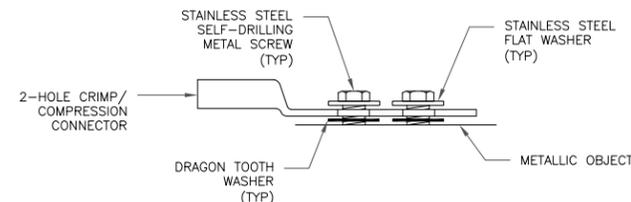
4 TYPICAL ANTENNA CABLE GROUNDING
SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GROUND BARS

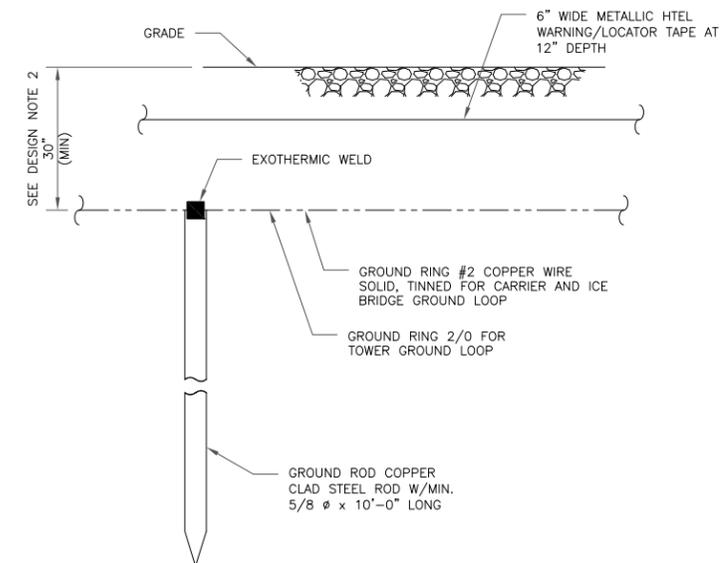


SINGLE CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

5 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

- GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL.
- GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

6 GROUND ROD DETAIL
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:



VERIZON SITE NUMBER: 123825

BU #: 815876
SF POTRERO WEST
 1431 SAN BRUNO AVENUE
 SAN FRANCISCO, CA 94107
 EXISTING 53'-0" MONOPOLE
 2021.0060.0102

ISSUED FOR:

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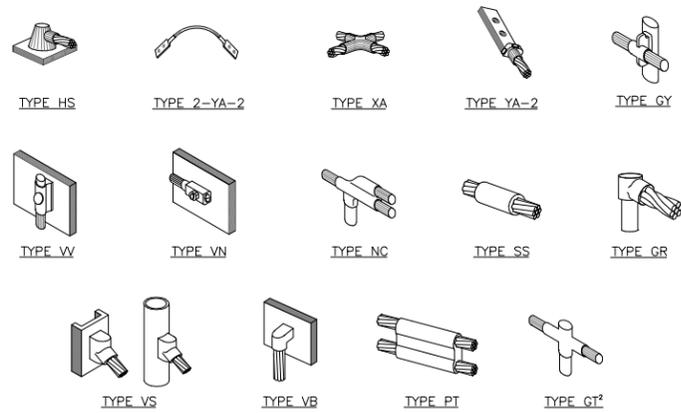
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SHEET NUMBER:

G-2

REVISION:

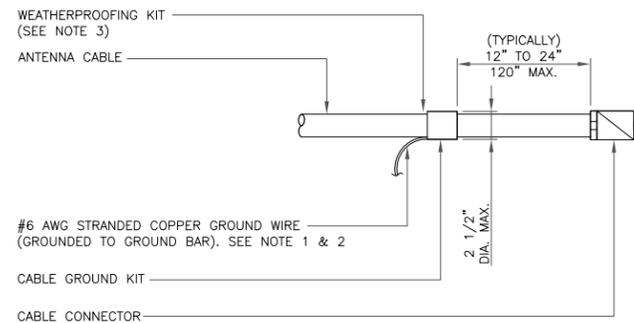
1



NOTE:

1. ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH CONSTRUCTION MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.
2. MOLD TYPE ONLY TO BE USED BELOW GRADE WHEN CONNECTING GROUND RING TO GROUND ROD.

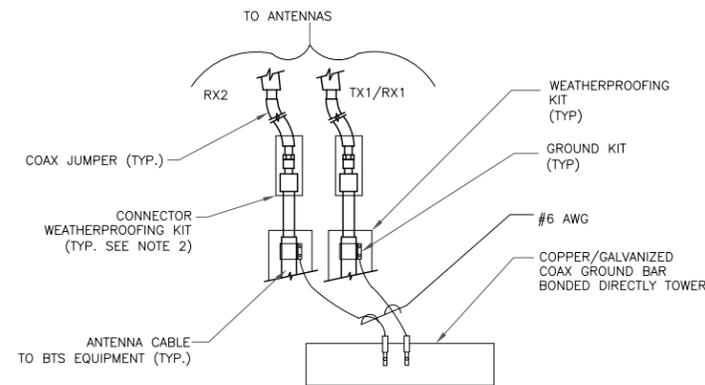
1 CADWELD GROUNDING CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

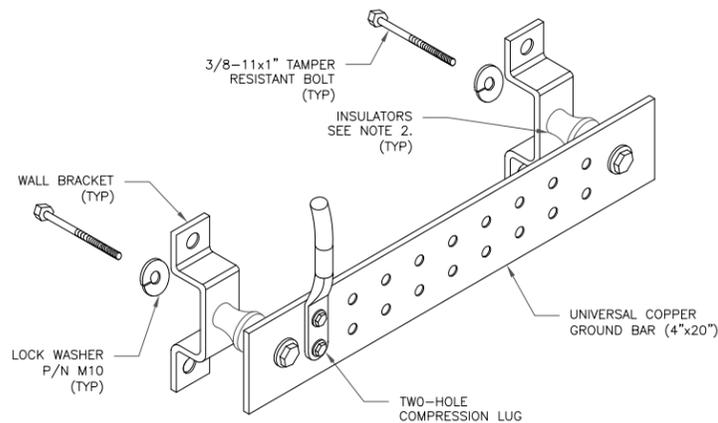
3 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

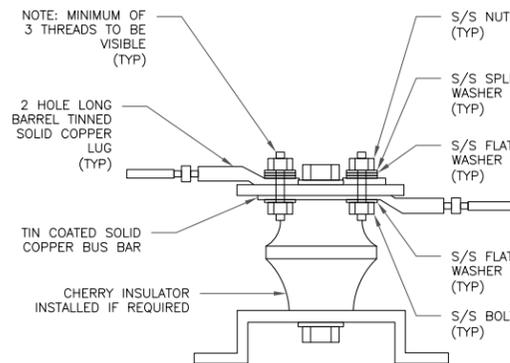
4 GROUND CABLE CONNECTION
SCALE: NOT TO SCALE



NOTES:

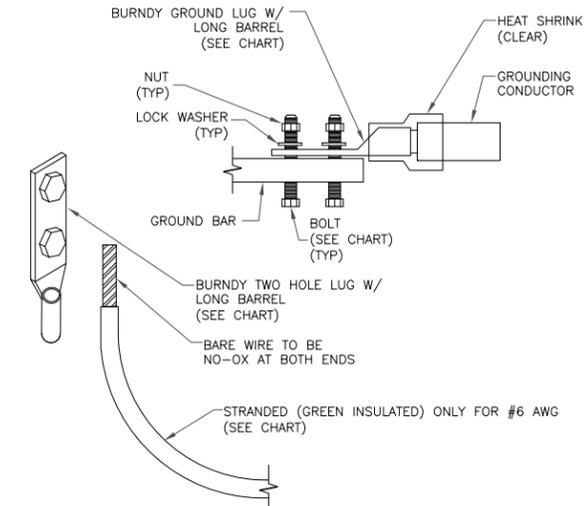
1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY GAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION, CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.
2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL. USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

6 GROUND BAR DETAIL
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE

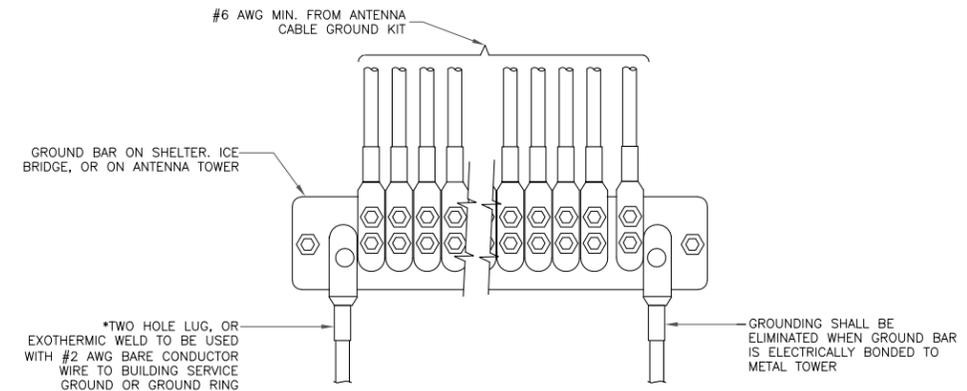
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT



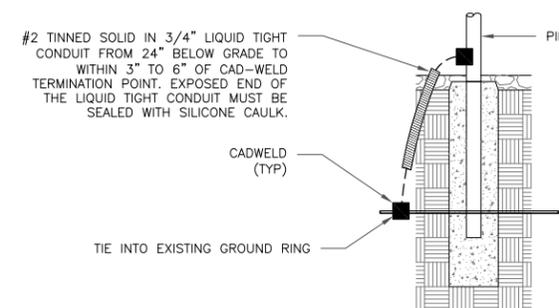
NOTES:

1. ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.

2 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



5 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE



8 TRANSITIONING GROUND DETAIL
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:



VERIZON SITE NUMBER: 123825

BU #: 815876
SF POTRERO WEST
 1431 SAN BRUNO AVENUE
 SAN FRANCISCO, CA 94107
 EXISTING 53'-0" MONOPOLE
 2021.0060.0102

ISSUED FOR:				
REV	DATE	DRWN	DESCRIPTION	DES./QA
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SHEET NUMBER: **G-3** REVISION: **1**



Tower Engineering Solutions
 1320 GREENWAY DRIVE, SUITE 600
 IRVING, TX 75038
 PH: (972) 483-0607



MODIFICATION AND DESIGN DRAWINGS FOR EXISTING ANTENNA MOUNTS EXISTING MONOPOLE TOWER

PROPOSED CARRIER: VERIZON

TOWER OWNER: CROWN CASTLE / TOWER OWNER SITE #: 815876

CARRIER SITE #/NAME: 123825-VZW / POTRERO WEST

COORDINATES (LATITUDE: 37.751039°, LONGITUDE: -122.403582°)

FUZE ID # 16231303



DRAWN BY: AB | CHECKED BY: ID/HMA

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	AB	06/28/21

SHEET TITLE:

TITLE SHEET

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SHEET NUMBER: T-1 | REV #: 0

Contractor PMI Requirements	SHEET	SHEET TITLE	REV
PMI Accessed At https://pmi.vzwsmart.com Smart Tool Vendor Project Number 10066939 VzW Location Code (PSLC) 123825 *** PMI and Requirements also embedded in Mount Analysis Report	T-1	TITLE SHEET	0
	BOM	BILL OF MATERIALS	0
	GN-1	GENERAL NOTES	0
	A-1	ANTENNA MOUNT MODIFICATION DETAILS	0
	A-2	ANTENNA MOUNT PHOTOS	0
	D-1	STANDARD DETAILS	0
	D-2	STANDARD DETAILS	0
	SCX-PS	SITEPRO CROSSOVER PLATE PIPE STANDOFF KIT	
	VZWSMART-PLK1	SUPPORT RAIL KIT	
	VZWSMART-PLK7	MONOPOLE COLLAR MOUNT ASSEMBLY	
VZWSMART-PLK6	V-BRACING KIT FOR MONOPOLE		
VzW APPROVED SMART KIT VENDORS			
Refer to Mount Modification Drawings Page for VzW SMART KIT Approved Vendors			

NOTE:

1. THE MODIFICATION DRAWINGS ARE BASED ON THE TES PROJECT NO. 10040639, DATED 04/23/2021.

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE ANSI/TIA-222-H, ANSI/ASSP A10.48, AND ANY OTHER GOVERNING BUILDING CODES AND OSHA SAFETY REGULATIONS.
2. ALL WORK INDICATED ON THE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TELECOMMUNICATIONS TOWER, POLE AND FOUNDATION CONSTRUCTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND FABRICATION OF ALL MISCELLANEOUS PARTS (SUCH AS SHIMS), TEMPORARY SUPPORTS, AND GUYINGS, ETC., PER ANSI/ASSP A10.48, TO COMPLETE THE ASSEMBLY AS SHOWN IN THE DRAWINGS.
4. CONTRACTOR SHALL PROCEED WITH THE INSTALLATION WORK CAREFULLY SO THE WORK WILL NOT DAMAGE ANY EXISTING CABLE, EQUIPMENT OR THE STRUCTURE.
5. THE USE OF GAS TORCH OR WELDER, ARE NOT ALLOWED ON ANY TOWER STRUCTURE WITHOUT THE CONSENT OF THE TOWER OWNER.
6. GENERALLY THE CONTRACTOR IS RESPONSIBLE TO CONDUCT AN ONSITE VISIT SURVEY OF THE JOB SITE AFTER AWARD, AND REPORT ANY ISSUES WITH THE SITE TO **TES** BEFORE PROCEEDING CONSTRUCTION.
7. IT IS THE RESPONSIBILITY OF THE GC TO VERIFY THAT THERE IS NO INTERFERENCES (WITH SAFETY CLIMB BRACKETS, TRANSMISSION LINES, ETC.) PRIOR TO MOBILIZATION AND INSTALLATION OF THESE MODIFICATIONS.
8. PLEASE NOTIFY TES IMMEDIATELY IF ANY INSTALLATION ISSUES OCCUR RELATED TO THIS DRAWING @ 972-483-0607 OR EMAIL-TESORDERS@TESTOWER.US

FABRICATION

1. ALL STEEL SHALL MEET OR EXCEED THE MINIMUM STRENGTH AS SPECIFIED IN THE DRAWINGS. IF YIELD STRENGTH WAS NOT NOTED IN THE DRAWINGS, CONTRACTORS SHALL CONTACT TES FOR DIRECTION.
2. ALL FIELD CUT EDGES SHALL BE GROUND SMOOTH. ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINGA COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

WELDING

1. ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNO. (E70XX UNLESS NOTED OTHERWISE).
2. PRIOR TO FIELD WELDING GALVANIZED MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING APPROX. 0.5" BEYOND THE PROPOSED FIELD WELD SURFACES.
3. ALL WELDS SHALL BE INSPECTED VISUALLY. A MINIMUM OF 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. 100% OF WELDS SHALL BE INSPECTED IF DEFECTS ARE FOUND.
4. WELD INSPECTIONS SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
5. AFTER INSPECTION, ALL FIELD WELDED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINGA COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

BOLTED ASSEMBLIES AND TIGHTENING OF CONNECTIONS

1. ALL HIGH STRENGTH BOLTS SHALL CONFORM TO THE PROVISIONS OF THE SPECIFICATIONS FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS AS APPROVED BY THE RSCC.
2. FLANGE BOLTS SHALL BE TIGHTENED BY THE AISC "TURN-OF-THE-NUT" METHOD. THE FOLLOWING TABLE SHOULD BE USED FOR THE "TURN-OF-THE-NUT" TIGHTENING.
3. SPLICE BOLTS AND ALL OTHER BOLTS IN BEARING TYPE CONNECTIONS SHALL BE TIGHTENED TO A SNUG-TIGHT CONDITION.
4. THE SNUG-TIGHT CONDITION IS DEFINED AS THE TIGHTNESS ATTAINED BY EITHER A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER WITH AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.

VERIFICATION AND INSPECTION

1. IF APPLICABLE, VERIFICATION INSPECTION TO BE PERFORMED SHALL BE IN ACCORDANCE TO IBC-2018 SECTION 1705.2 FOR STEEL CONSTRUCTION AND TABLE 1705.3 FOR CONCRETE CONSTRUCTION.

TABLE 8.2 NUT ROTATION FROM SNUG-TIGHT CONDITION FOR TURN-OF-NUT PRETENSIONING^{a,b}

BOLT LENGTH ^f	DISPOSITION OF OUTER FACE OF BOLTED PARTS		
	BOTH FACES NORMAL TO BOLT AXIS	ONE FACE NORMAL TO BOLT AXIS, OTHER SLOPED NOT MORE THAN 1:20 ^d	BOTH FACES SLOPED NOT MORE THAN 1:20 FROM NORMAL TO BOLT AXIS ^d
NOT MORE THAN 4d _b	1/3 TURN	1/2 TURN	2/3 TURN
MORE THAN 4d _b BUT NOT MORE THAN 8d _b	1/2 TURN	2/3 TURN	5/6 TURN
MORE THAN 8d _b BUT NOT MORE THAN 12d _b	2/3 TURN	5/6 TURN	1 TURN

- ^a NUT ROTATION IS RELATIVE TO BOLT REGARDLESS OF THE ELEMENT (NUT OR BOLT) BEING TURNED. FOR REQUIRED NUT ROTATIONS OF 1/2 TURN AND LESS, THE TOLERANCE IS PLUS OR MINUS 30 DEGREES; FOR REQUIRED NUT ROTATIONS OF 2/3 TURN AND MORE, THE TOLERANCE IS PLUS OR MINUS 45 DEGREES.
- ^b APPLICABLE ONLY TO JOINTS IN WHICH ALL MATERIAL WITHIN THE GRIP IS STEEL.
- ^c WHEN THE BOLT LENGTH EXCEEDS 12d_b, THE REQUIRED NUT ROTATION SHALL BE DETERMINED BY ACTUAL TESTING IN A SUITABLE TENSION CALIBRATOR THAT SIMULATES THE CONDITIONS OF SOLIDLY FITTING STEEL.
- ^d BEVELED WASHER NOT USED.

SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, JUNE 30, 2004 RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS

FIELD HOT WORK PLAN NOTES:

FOLLOWING GUIDELINES SHALL BE COMPLIED WITH:

1. CONTRACTOR'S RESPONSIBILITY TO COMPLETE A HOT WORK PLAN IF AWARDED PER CUSTOMER SPECIFICATIONS GUIDELINES FOR WELDING, CUTTING & SPARK PRODUCING WORK.
2. HAVE A FIRE PLAN APPROVED BY THE CUSTOMER AND THEIR SAFETY MANAGEMENT DEPT.
3. CONTRACTOR MUST OBTAIN THE CONTACT INFO OF THE LOCAL FIRE DEPARTMENT AND THE 911 ADDRESS OF THE TOWER SITE BEFORE CONSTRUCTION.
4. CONTRACTOR SHALL MAKE SURE THAT CELL PHONE COVERAGE IS AVAILABLE IN THE TOWER SITE. IF CELL COVERAGE IS NOT AVAILABLE, AN IMMEDIATE AVAILABLE MEANS OF DIRECT COMMUNICATION WITH THE FIRE DEPARTMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION START.
5. ALL CONSTRUCTION SHALL BE PERFORMED UNDER WIND SPEED LESS THAN 10 MPH ON THE GROUND LEVEL. IF WIND SPEED INCREASE, CONTRACTOR MUST DETERMINE IF CONSTRUCTION SHALL BE DISCONTINUED.
6. FIRE SUPPRESSION EQUIPMENT MUST BE MADE AVAILABLE ON SITE AND READY TO USE.
7. CONTRACTOR SHALL ASSIGN A FIRE WATCHER TO PERFORM FIRE-FIGHTING DUTIES.
8. ALL WELDERS SHALL BE AWS OR STATE CERTIFIED. THEY MUST ALSO BE EXPERIENCED IN WELDING ON GALVANIZED MATERIALS.
9. IF IT IS POSSIBLE, ALL EXISTING COAX NEAR WELDING AREA SHALL BE TEMPORARILY MOVED AWAY FROM THE WELDING AREA BEFORE WELDING THE PLATES.
10. PLEASE REPORT ANY FIELD ISSUE TO TES @ 972-483-0607.



Tower Engineering Solutions

1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



TES JOB NO:
10066939

CUSTOMER SITE NO:
123825-VZW
CUSTOMER SITE NAME:
POTRERO WEST
1435 SAN BRUNO AVE
SAN FRANCISCO, CA 94110



DRAWN BY: AB | CHECKED BY: ID/HMA

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	AB	06/28/21

SHEET TITLE:

GENERAL NOTES

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SHEET NUMBER: | REV #:

GN-1 | 0

SCOPE OF WORK

1 REPLACE ALL EXISTING ANTENNA MOUNT PIPES WITH NEW 2" PST ANTENNA MOUNT PIPE (8'-0" LONG) THEN RELOCATE EXISTING ANTENNA TO NEW MOUNT PIPES. (3) PER SECTOR. EXISTING ANTENNA RAD CENTER TO BE MAINTAINED. SEE SHEET D-1 FOR DETAILS.

NOTE:
CONTRACTOR TO COORDINATE WITH CARRIER PRIOR TO REPLACING OF EXISTING ANTENNA MOUNT PIPES TO DETERMINE IF EXISTING ANTENNAS NEEDS TO BE TURNED DOWN.

2 INSTALL NEW SITEPRO CROSSOVER PLATE PIPE STANDOFF KIT. SEE SHEET SCX-PS AND D-1 FOR DETAILS.

3 INSTALL NEW VZSMART SUPPORT RAIL KIT. SEE SHEET D-2 AND VZSMART-PLK1 FOR DETAILS.

NOTE:
USE PROVIDED LONGER ANGLES (L33375-5), IF ANGLES FROM SUPPORT RAIL KIT IS TOO SHORT. SEE SHEET D-2 FOR FOR DETAIL.

4 INSTALL NEW VZSMART MONOPOLE COLLAR MOUNT ASSEMBLY (NOT SHOWN FOR CLARITY). SEE SHEET VZSMART-PLK7 FOR DETAILS.

5 INSTALL NEW VZSMART V-BRACING KIT FOR MONOPOLE BELOW THE EXISTING STANDOFF BRACING, (1) PER SECTOR. SEE SHEET VZSMART-PLK6 FOR DETAILS.

6 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP, REMOVAL AND DISPOSAL OF EXCESS MATERIALS USED AND REMOVED FROM THE STRUCTURE AT THE COMPLETION OF THE PROJECT.

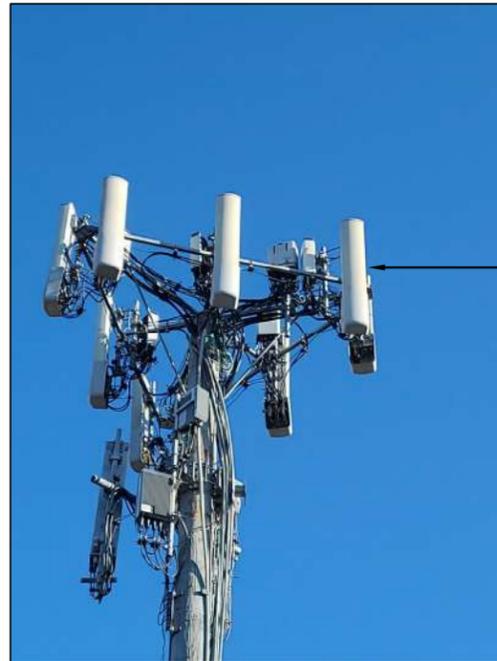
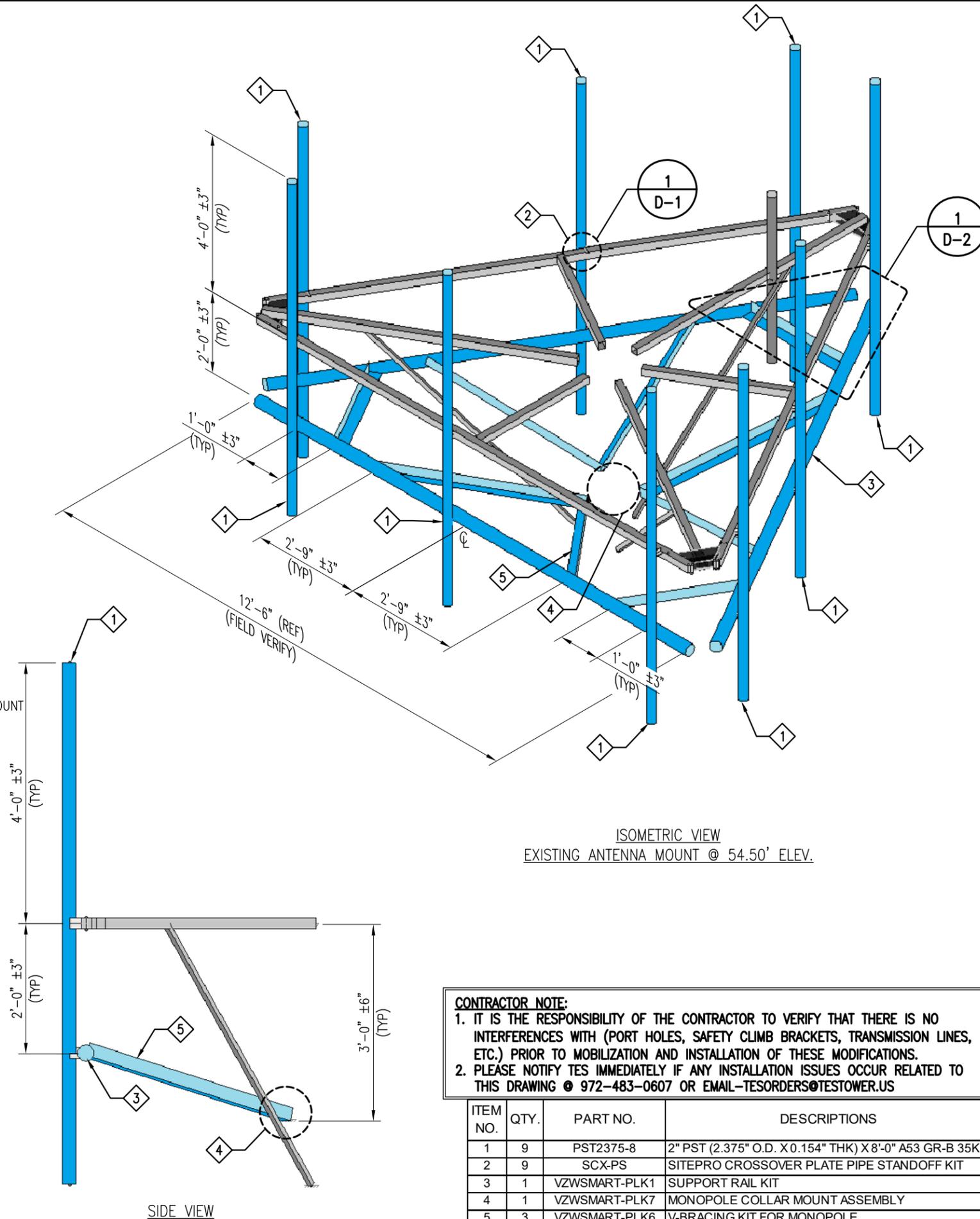


PHOTO 1

EXISTING ANTENNA MOUNT
@ 54.50' ELEV



ISOMETRIC VIEW
EXISTING ANTENNA MOUNT @ 54.50' ELEV.

SIDE VIEW

NOTES:

1. TEMPORARILY RELOCATE ANY EXISTING COAX ATTACHED TO THE LEGS AND/OR ANY OTHER MEMBERS WHERE OBSTRUCTION WITH THE PROPOSED MODIFICATION MAY OCCUR.
2. WHEN FIELD CUTTING AND DRILLING ANGLES, USE SAME GAGE LINES AND EDGE DISTANCES AS INDICATED ON SHOP CUT AND DRILLED ENDS.
3. APPLY (2) COATS OF ZINGA COLD GALVANIZING COMPOUND AS PER THE MANUFACTURER'S SPECIFICATIONS TO ALL FIELD CUT AND DRILLED AREAS.
4. MEMBERS IN BLUE COLOR ARE NEW REINFORCEMENTS.

CONTRACTOR NOTE:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THERE IS NO INTERFERENCES WITH (PORT HOLES, SAFETY CLIMB BRACKETS, TRANSMISSION LINES, ETC.) PRIOR TO MOBILIZATION AND INSTALLATION OF THESE MODIFICATIONS.
2. PLEASE NOTIFY TES IMMEDIATELY IF ANY INSTALLATION ISSUES OCCUR RELATED TO THIS DRAWING @ 972-483-0607 OR EMAIL-TESORDERS@TESTOWER.US

ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	9	PST2375-8	2" PST (2.375" O.D. X 0.154" THK) X 8'-0" A53 GR-B 35KSI
2	9	SCX-PS	SITEPRO CROSSOVER PLATE PIPE STANDOFF KIT
3	1	VZSMART-PLK1	SUPPORT RAIL KIT
4	1	VZSMART-PLK7	MONOPOLE COLLAR MOUNT ASSEMBLY
5	3	VZSMART-PLK6	V-BRACING KIT FOR MONOPOLE



Tower Engineering Solutions
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IRVING, TX 75038
PH: (972) 483-0607



TES JOB NO:
10066939

CUSTOMER SITE NO:
123825-VZW

CUSTOMER SITE NAME:
POTRERO WEST

1435 SAN BRUNO AVE
SAN FRANCISCO, CA 94110



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1	FIRST ISSUE	AB	06/28/21

SHEET TITLE:

ANTENNA MOUNT
MODIFICATION DETAILS

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SHEET NUMBER:

A-1

REV #:

0



PHOTO 1

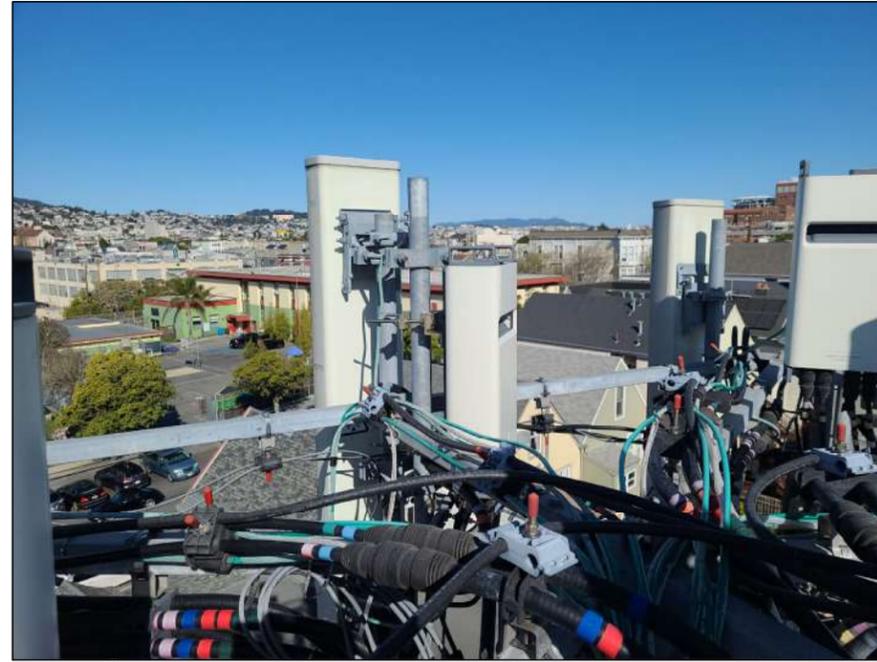


PHOTO 2



PHOTO 3

NOTE:
 EXISTING RRUS/EQUIPMENT MAY BE RELOCATED
 ALONG THE MEMBER TO ACCOMMODATE THE
 INSTALLATION OF NEW MOUNT MODIFICATION



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 IRVING, TX 75038
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TES JOB NO:
 10066939

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 123825-VZW

CUSTOMER SITE NAME:
 POTRERO WEST

1435 SAN BRUNO AVE
 SAN FRANCISCO, CA 94110



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1	FIRST ISSUE	AB	06/28/21

SHEET TITLE:

ANTENNA MOUNT
 PHOTOS

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SHEET NUMBER: A-2 | REV #: 0



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 IRVING, TX 75038
 PH: (972) 483-0607



TES JOB NO:
10066939

CUSTOMER SITE NO:
123825-VZW

CUSTOMER SITE NAME:
POTRERO WEST

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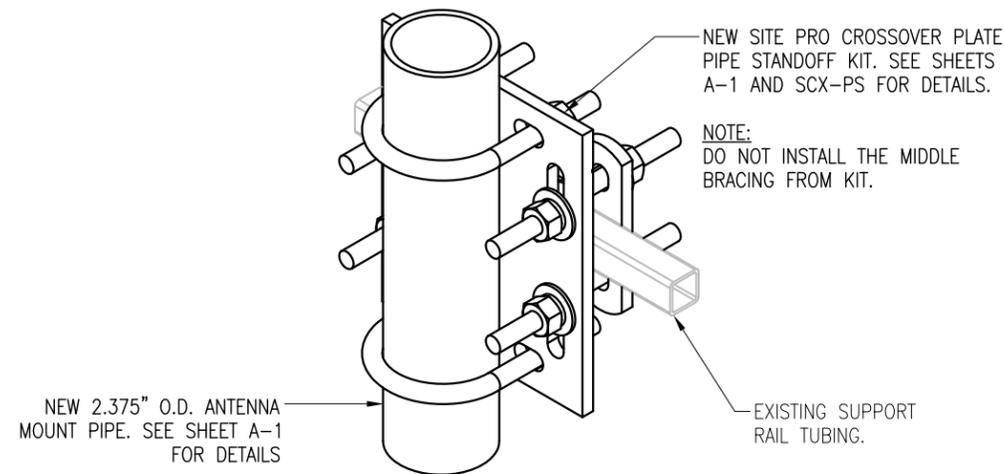
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SHEET NUMBER: | REV #:

D-1 | 0



1
D-1 DETAIL

- NOTES:
- HOT-DIPPED GALVANIZED PER ASTM A123.
 - ALL HOLES ARE 11/16" DIA. U.N.O



Tower Engineering Solutions
 1320 GREENWAY DRIVE, SUITE 600
 IRVING, TX 75038
 PH: (972) 483-0607



TES JOB NO:
10066939

CUSTOMER SITE NO:
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 CUSTOMER SITE NAME:
POTRERO WEST
 1435 SAN BRUNO AVE
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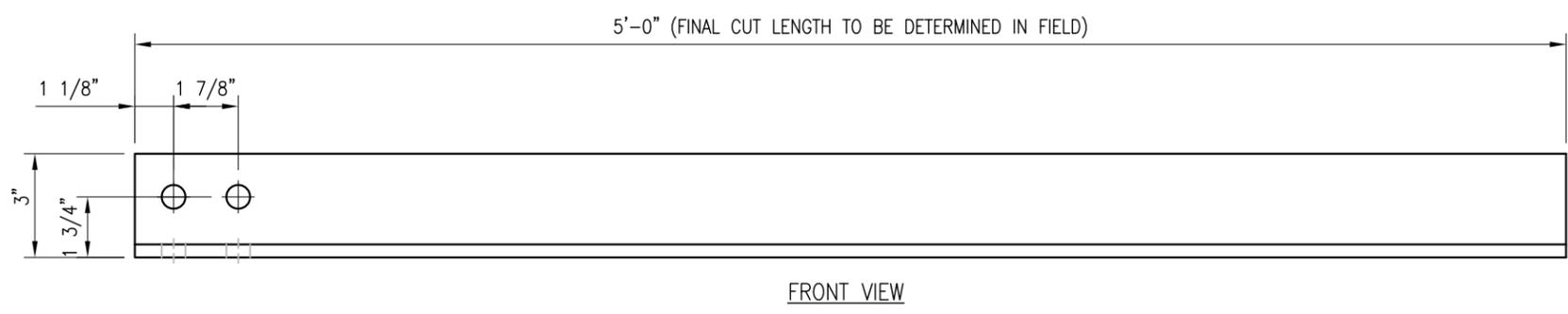
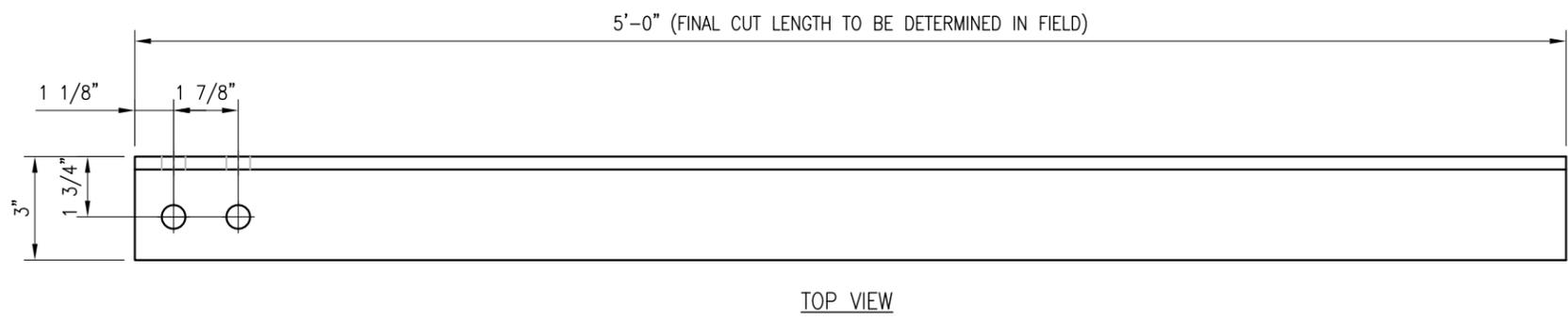
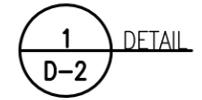
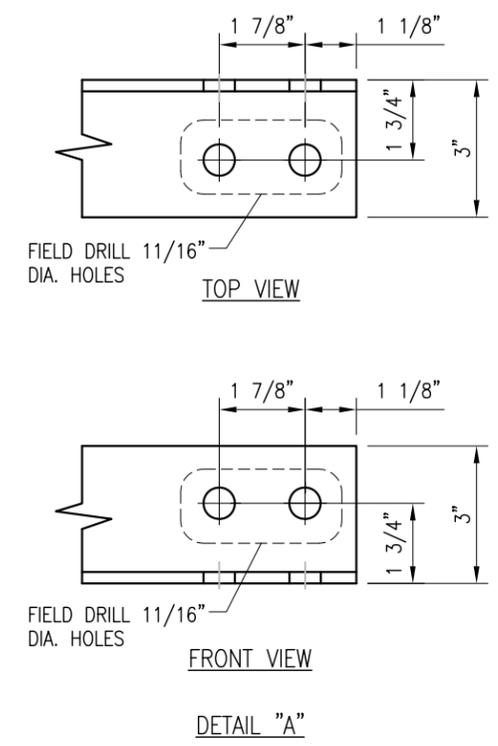
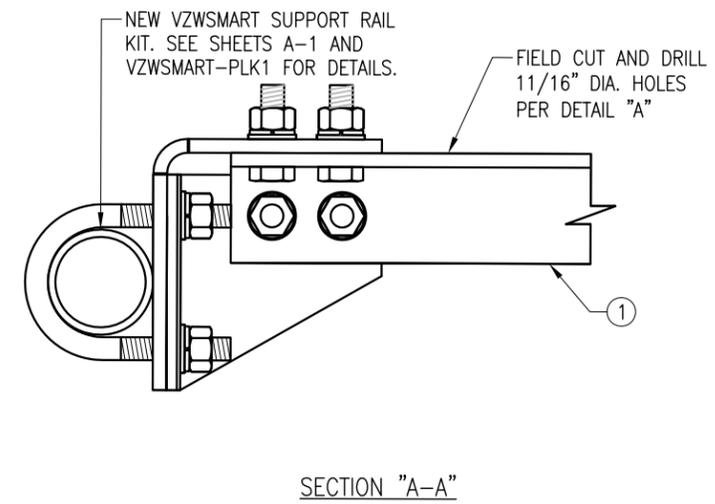
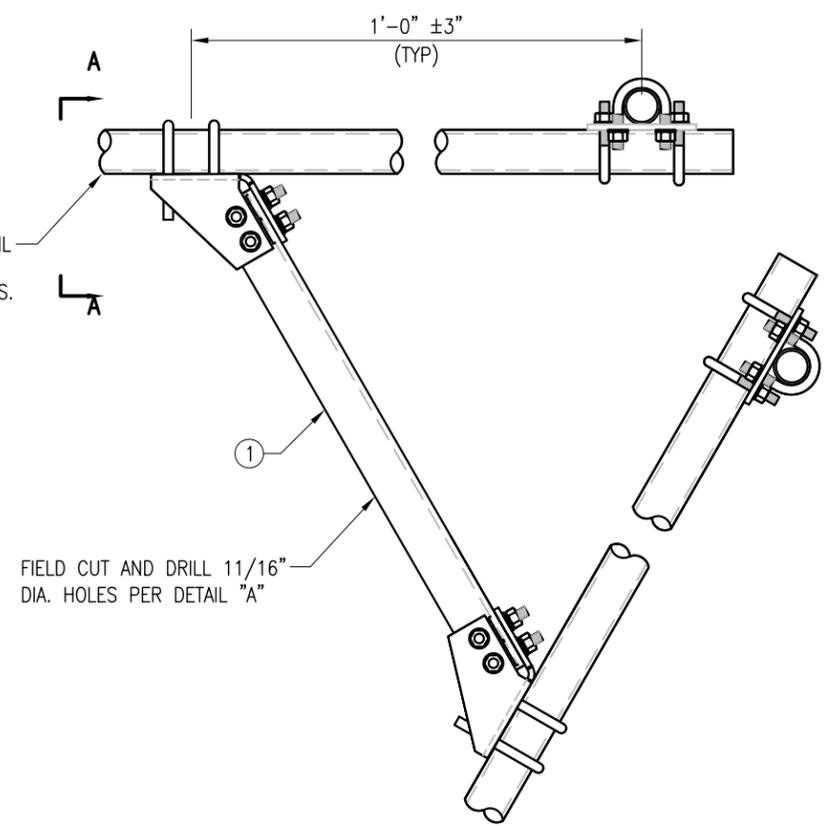
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SHEET NUMBER: D-2	REV #: 0
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L33375-5
 L 3" X 3" X 3/8" A36
 (36.5 LBS)

ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	3	L33375-5	L 3" X 3" X 3/8" X 5'-0" A36

NOTES:
 1. HOT-DIPPED GALVANIZED PER ASTM A123.
 2. ALL HOLES ARE 11/16" DIA. U.N.O

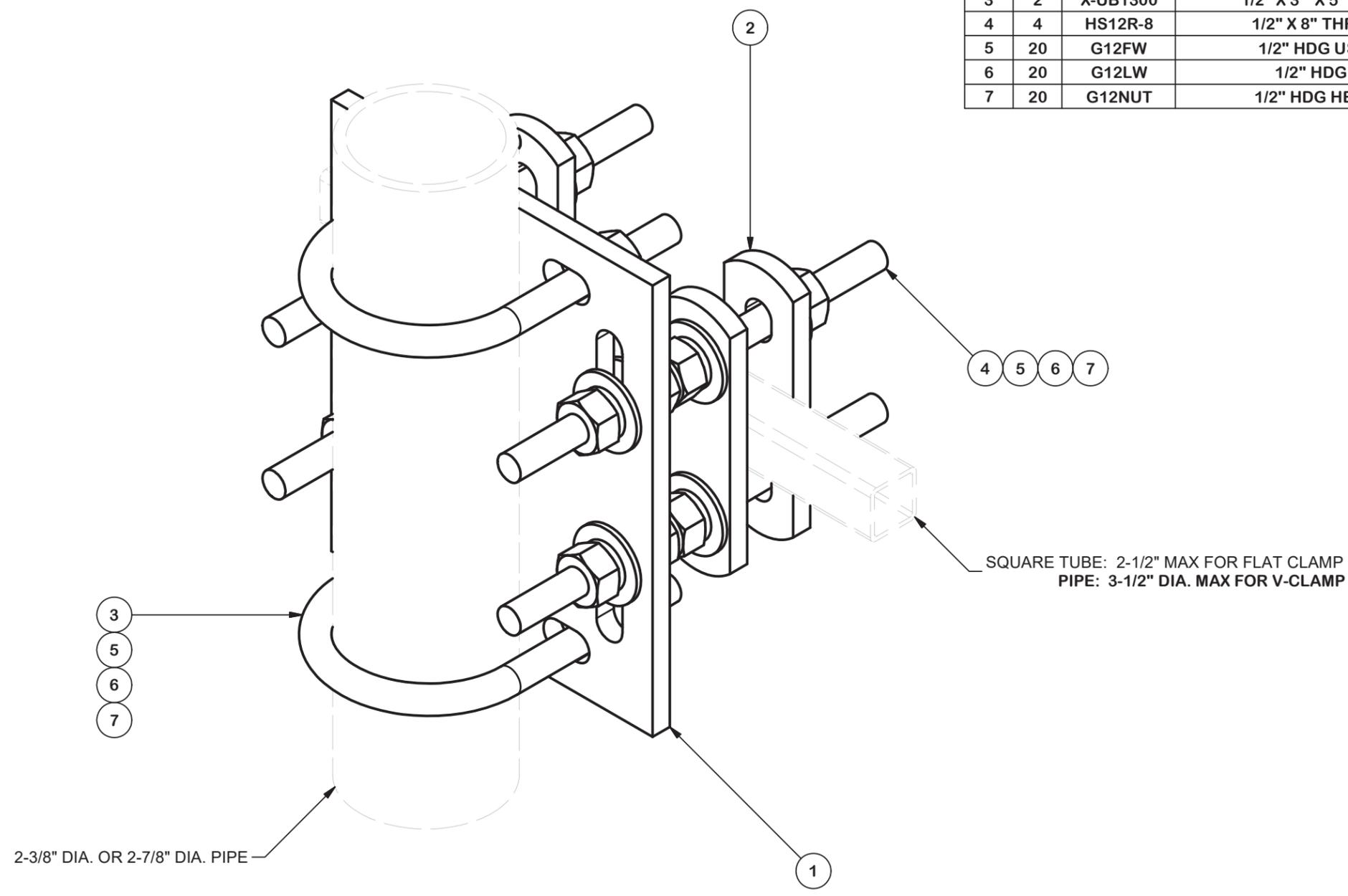
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PLEASE REFER TO THE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION DETAILS



HEAVY STAMP
PART NUMBER

PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	1	SCX4	CROSSOVER PLATE	8 1/2 in	6.02	6.02
2	4	X-116139	CLAMP (3" FLAT CLAMP)		0.69	2.78
2	4	X-100064	CLAMP (4" V-CLAMP) GALVANIZED		0.91	3.65
3	2	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.63	1.25
3	2	X-UB1300	1/2" X 3" X 5" X 2" U-BOLT (HDG.)		0.70	1.39
4	4	HS12R-8	1/2" X 8" THREADED ROD (HS)		0.47	1.89
5	20	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	0.68
6	20	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	0.28
7	20	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	1.43
TOTAL WT. #						19.37



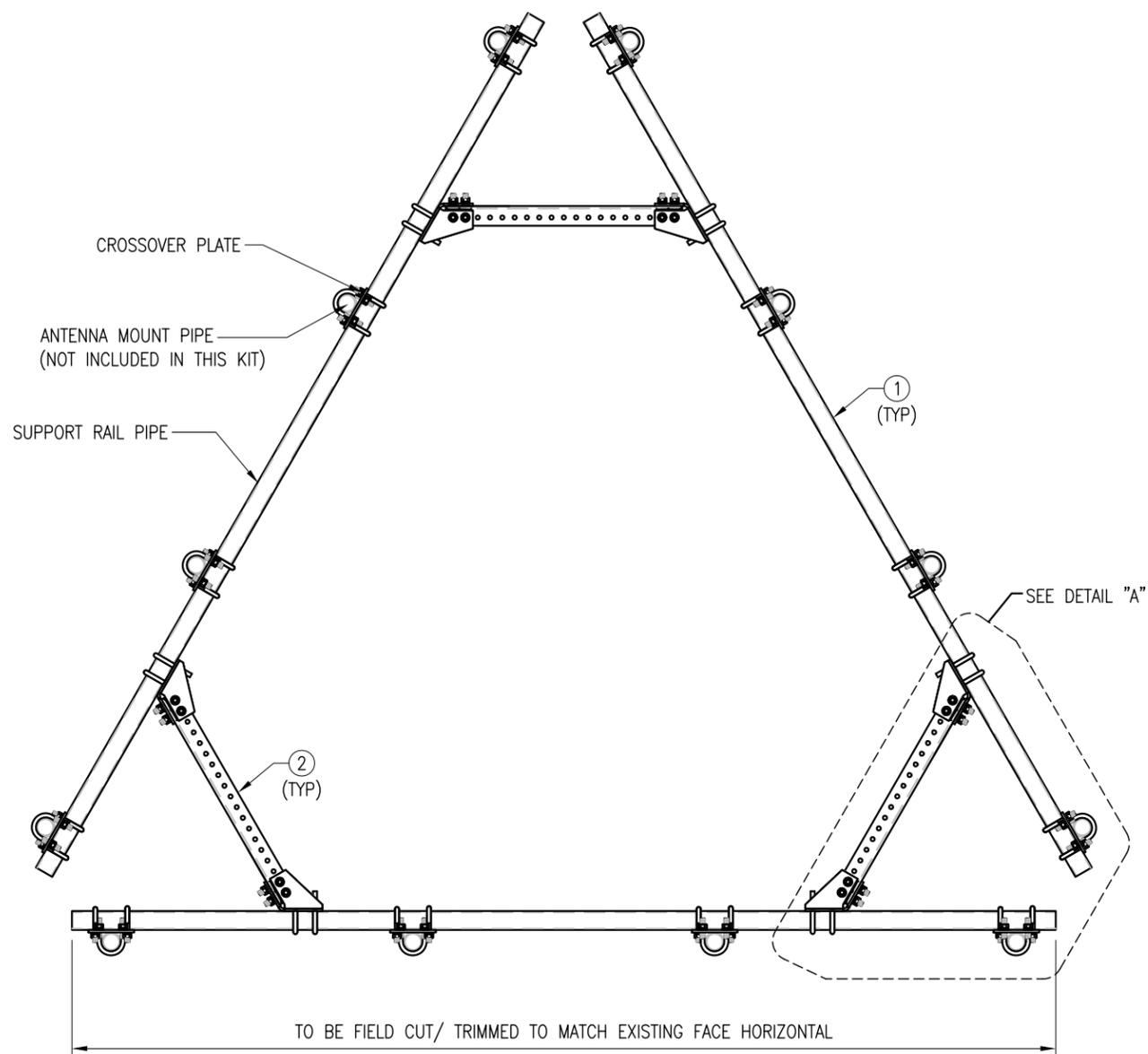
FINISH:
HOT DIP GALVANIZED.

TOLERANCE NOTES
 TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
 SAWED, SHEARED AND GAS CUT EDGES ($\pm 0.030"$)
 DRILLED AND GAS CUT HOLES ($\pm 0.030"$) - NO CONING OF HOLES
 LASER CUT EDGES AND HOLES ($\pm 0.010"$) - NO CONING OF HOLES
 BENDS ARE $\pm 1/2$ DEGREE
 ALL OTHER MACHINING ($\pm 0.030"$)
 ALL OTHER ASSEMBLY ($\pm 0.060"$)

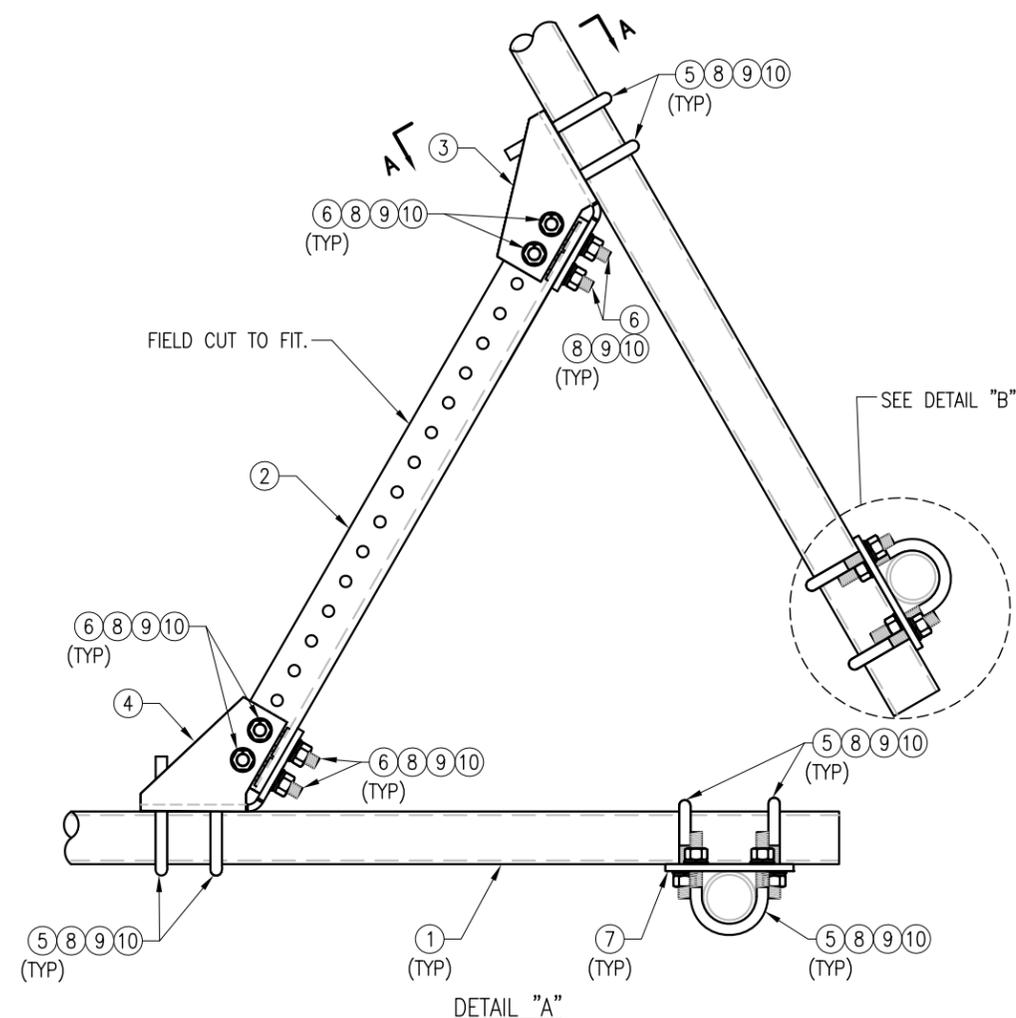
PROPRIETARY NOTE:
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DESCRIPTION			
CROSSOVER PLATE PIPE STANDOFF KIT			
CPD NO. SP1	DRAWN BY CSL 12/20/2017	ENG. APPROVAL 3RD PARTY	
CLASS 81	SUB 02	DRAWING USAGE SHOP	CHECKED BY BMC 12/20/2017

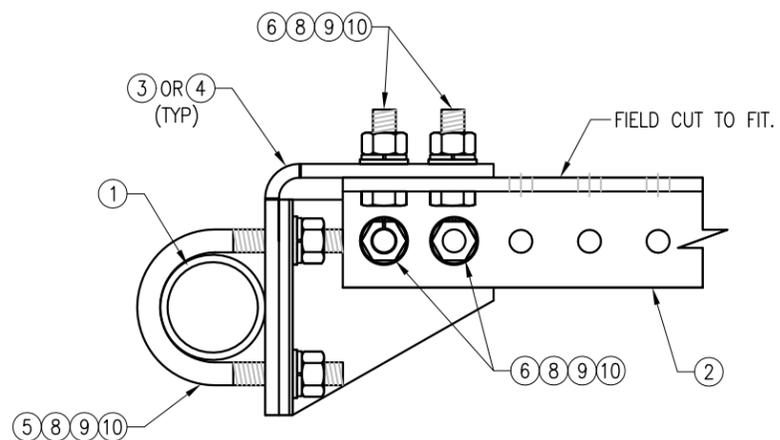
SITE PRO 1 A valmont COMPANY	Engineering Support Team: 1-888-753-7446	Locations: New York, NY Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX
	PART NO. SCX-PS	DWG. NO. SCX-PS



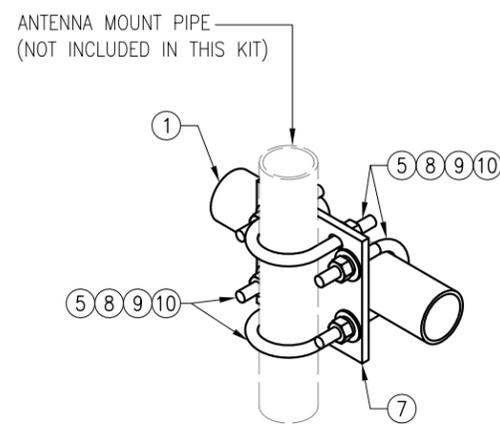
PLAN VIEW



DETAIL "A"



SECTION "A-A"



DETAIL "B"

NOTES:

1. HOT-DIPPED GALVANIZED PER ASTM A123.

VZW SMART-PLK1 (SUPPORT RAIL KIT)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	PST2875-12.5	2.5" PST (2.875" O.D. X 0.203" THK.) X 12'-6" A53 GR-B	PLK1-F1	292
2	3	L33375-3	L 3" X 3" X 3/8" X 3'-0" A36	PLK1-F1	66
3	3	CBP-L	CORNER BENT PLATE BRACKET	PLK1-F2	28
4	3	CBP-R	CORNER BENT PLATE BRACKET	PLK1-F2	28
5	60	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	82
6	24	---	BOLT 5/8" X 2" A325	---	9
7	12	PL375-857	PL 3/8" X 8 1/2" X 7" A36	PLK1-F3	77
8	144	FW-625	5/8" HDG USS FLAT WASHER	---	12
9	144	LW-625	5/8" HDG LOCK WASHER	---	3
10	144	NUT-625	5/8" HDG HEX NUT	---	17
GALVANIZED WT					504



DRAWN BY: H.R. CHECKED BY: HMA

REV.	DESCRIPTION	BY	DATE
△	FIRST ISSUE	H.R.	04/20/21
△			
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SHEET TITLE:
 VZWSMART-PLK1
 SUPPORT RAIL KIT

SHEET NUMBER: VZWSMART-PLK1
 REV #: 0

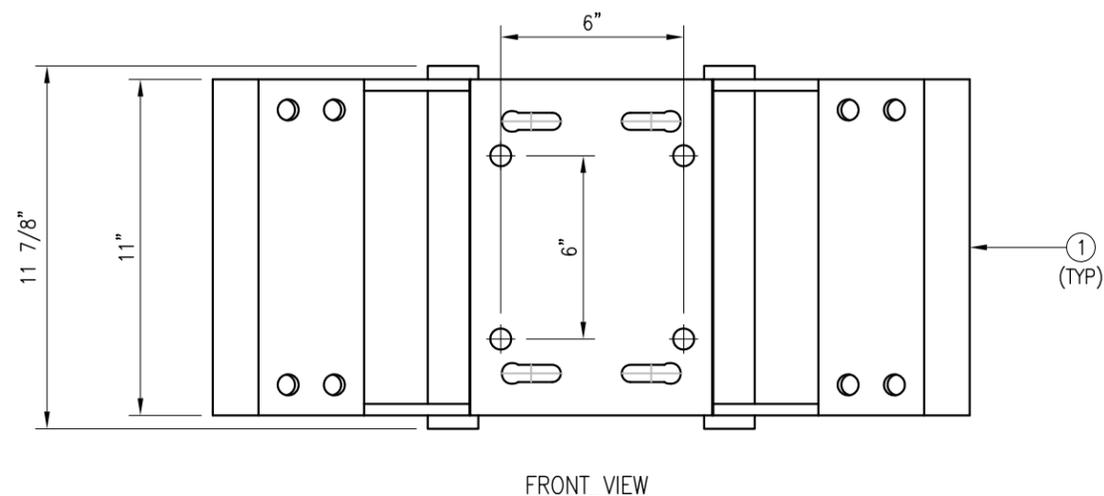
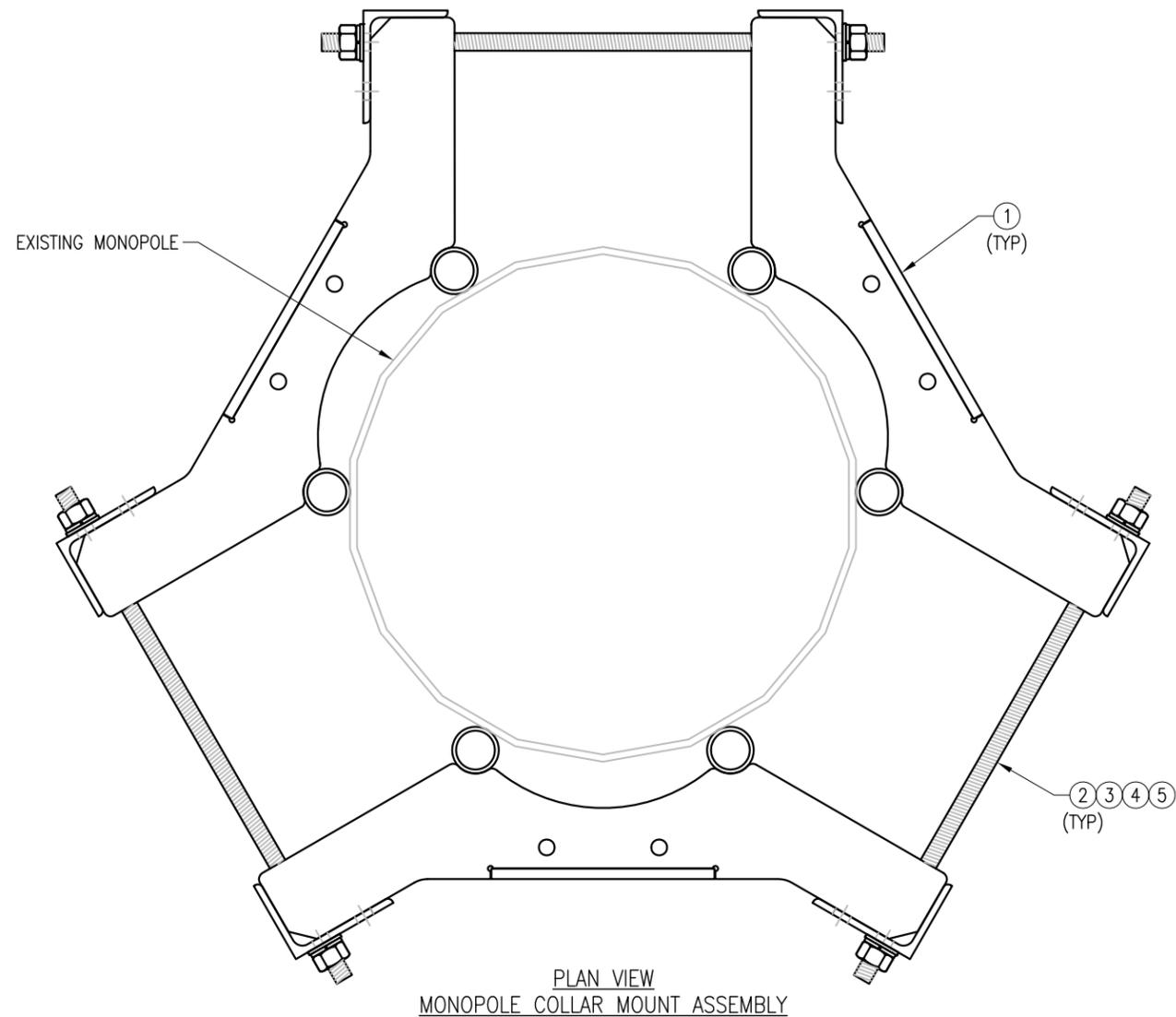


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REV.	DESCRIPTION	BY	DATE
△	FIRST ISSUE	BT	05/11/20
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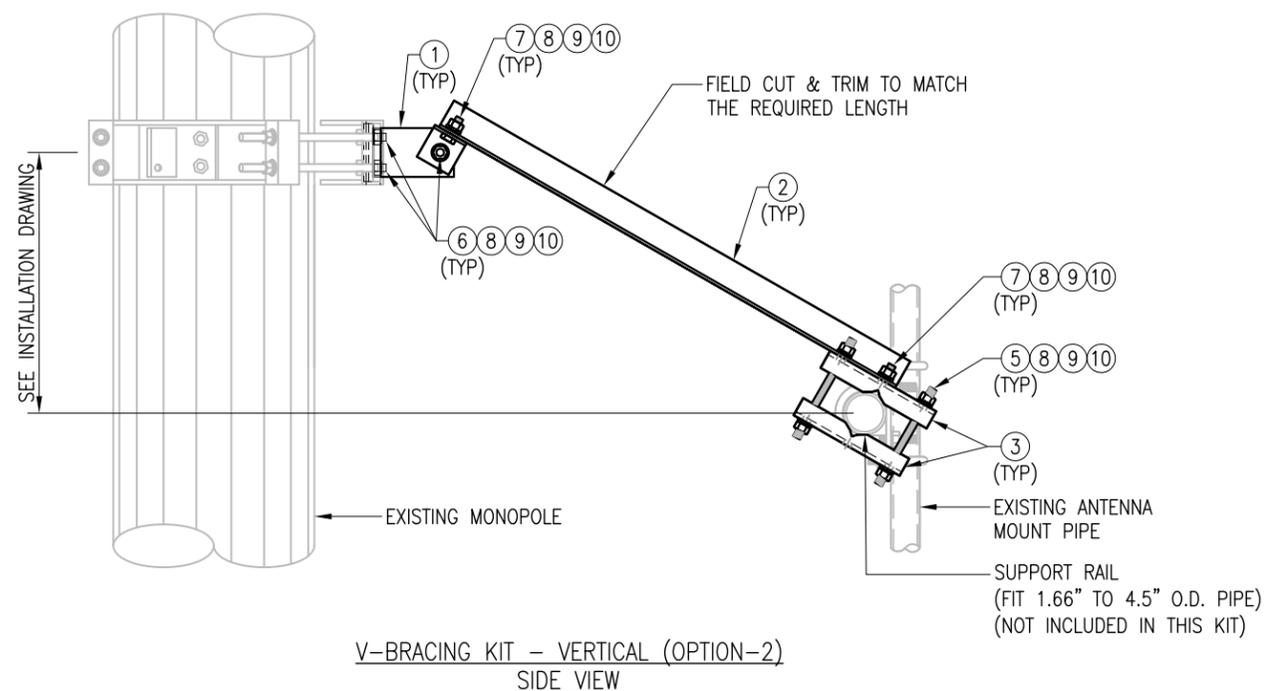
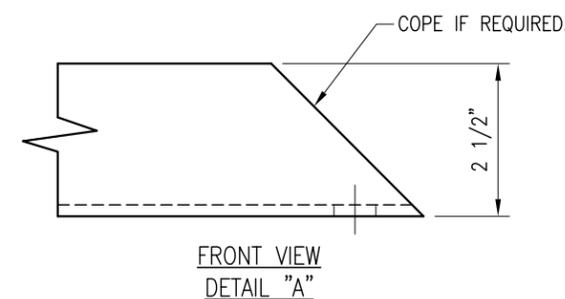
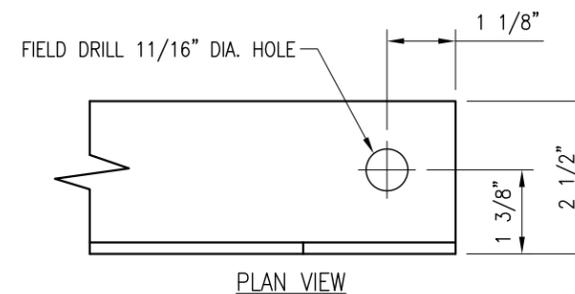
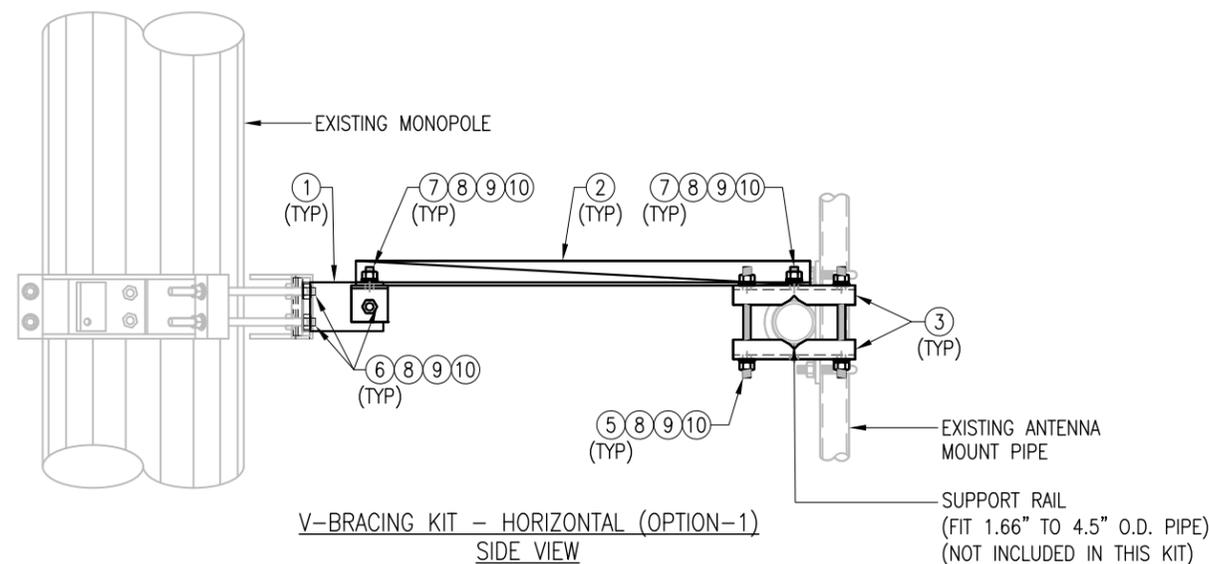
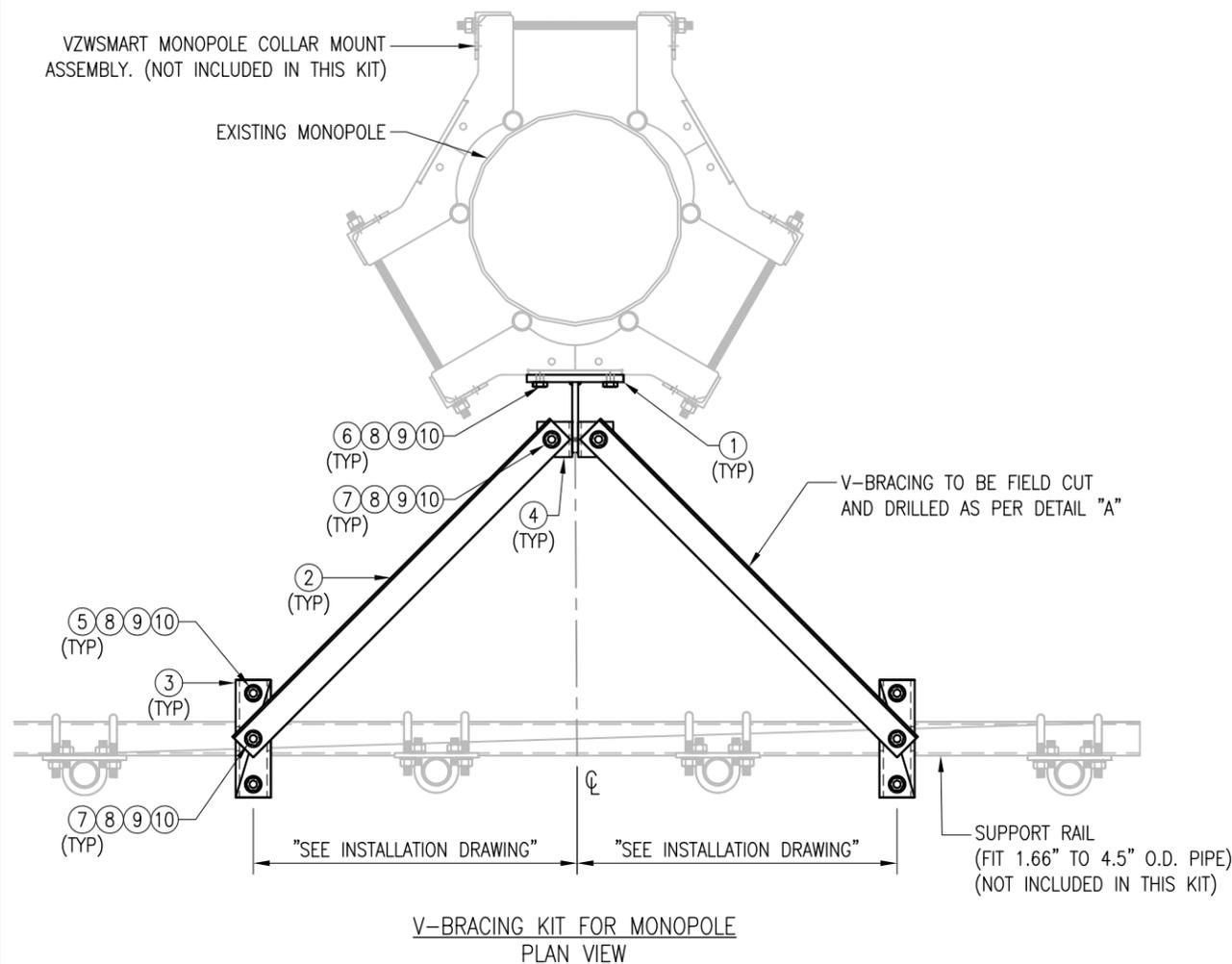
SHEET TITLE:
 VZSMART-PLK7
 MONOPOLE COLLAR
 MOUNT ASSEMBLY

SHEET NUMBER: VZSMART-PLK7 REV #: 0



- NOTES:
 1. FIT 12" TO 45" DIA MONOPOLE.
 2. HOT-DIPPED GALVANIZED PER ASTM A123.

VZSMART-PLK7 (MONOPOLE COLLAR MOUNT ASSEMBLY)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	CM-1245	COLLAR MOUNT ASSEMBLY	PLK7-F1	147
2	6	---	THREADED ROD 5/8" X 4'-0" A193-B7	---	
3	12	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	12	LW-625	5/8" HDG LOCK WASHER	---	0
5	12	NUT-625	5/8" HDG HEX NUT	---	1
GALVANIZED WT					150



NOTES:
 1. HOT-DIPPED GALVANIZED PER ASTM A123.

VZSMART-PLK6 (V-BRACING KIT FOR MONOPOLE)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	BRKW-6A	WELDMENT BRACKET	PLK6-F1	16
2	2	L252525-8	L 2 1/2" X 2 1/2" X 1/4" X 8'-0" A36	PLK6-F2	67
3	4	BP6875-10	PL 3/8" X 6 7/8" X 10" A36 BENT PLATE	PLK6-F2	20
4	2	AL-333	L 3" X 3" X 1/4" X 3" A36	PLK6-F2	3
5	4	---	THREADED ROD 5/8" DIA. X 10" F1554-36 HDG	---	---
6	5	---	BOLT 5/8" X 2 1/4" A325	---	---
7	4	---	BOLT 5/8" X 1 3/4" A325	---	---
8	17	FW-625	5/8" HDG USS FLAT WASHER	---	2
9	17	LW-625	5/8" HDG LOCK WASHER	---	0
10	17	NUT-625	5/8" HDG HEX NUT	---	2
GALVANIZED WT					109



DRAWN BY: FL CHECKED BY: KL/BT

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	FL	04/13/21

SHEET TITLE:
 VZSMART-PLK6
 V-BRACING KIT FOR
 MONOPOLE

SHEET NUMBER: VZSMART-PLK6
 REV #: 0

Case No. 97.043C
1435 San Bruno Avenue

SAN FRANCISCO
PLANNING COMMISSION
MOTION NO. 14328

ADOPTING FINDINGS RELATING TO THE APPROVAL OF A CONDITIONAL USE AUTHORIZATION TO INSTALL A TOTAL OF FOUR ANTENNAS ON AN EXISTING MONOPOLE AND ONE BASE TRANSCEIVER STATION ON THE GROUND ADJACENT TO THE EXISTING INDUSTRIAL BUILDING, IN AN M-1 (LIGHT INDUSTRIAL) DISTRICT AND A 65-J HEIGHT AND BULK DISTRICT, PURSUANT TO SECTION 227(i) OF THE PLANNING CODE.

Preamble

On January 8, 1997, Ernst & Young (hereinafter "Applicant"), agent for Sprint Spectrum (hereinafter "Project Sponsor") made application (hereinafter "Application"), for Conditional Use on the property at 1435 San Bruno, Lots 28 and 29 in Assessor's Block 4279, (hereinafter "Project Site") to install a total of four panel antennas on an existing monopole and one base transceiver station on the ground adjacent to the existing industrial building, as part of a wireless telecommunication network in general conformity with plans filed with the Application and labeled "Exhibit B" (hereinafter "Project") within an M-1 (Light Industrial) District and a 40-X Height and Bulk District.

On March 6, 1997 the San Francisco Planning Commission (hereinafter "Commission") conducted a duly noticed public hearing at a regularly scheduled meeting on Conditional Use Application Number 97.043C.

The proposed Conditional Use application was determined by the San Francisco Department of Planning (hereinafter "Department") to be categorically exempt from the environmental review process pursuant to Class 1 exemptions of Title 14 of the California Administrative Code. The Commission has reviewed and concurs with said determination.

The Commission has heard and considered the testimony presented to it at the public hearing and has further considered written materials and oral testimony presented on behalf of the applicant, Department staff, and other interested parties.

Findings

Having reviewed all the materials identified in the recitals above, and having heard oral testimony and arguments, this Commission finds, concludes, and determines as follows:

1. The Project Site lies within an M-1 District which allows installation of wireless telecommunications facilities as a conditional use pursuant to Section 227(i) of the Planning Code when such facility is found to be in conformity with the provisions of the General Plan and provided that operating requirements necessitate placement at this location.
2. The Project Site is contains Apex Sheet Metal.
3. The proposed four antennas and the base transceiver station are part of a wireless transmission network operated by Sprint Spectrum. The existing monopole is approximately 55 feet in height. The existing pole would be replaced by a new pole of equal height. Each antenna measures approximately five feet high by eight inches wide. The proposed antennas would be mounted below the existing GTE antennas and the tops of the antennas would be approximately 47 feet above sidewalk grade. The base transceiver station, which measures approximately 22 feet wide by 13 feet deep, would be located on the fourth floor of the building.
4. The Applicant has stated that the proposed Personal Communication Services (PCS) network will transmit and receive calls by radio waves operating in the 1,800 to 2,000 Megahertz (MHz) band which is regulated by the Federal Communications Commission (FCC) and which must comply with the FCC-adopted health and safety standards for electromagnetic radiation and radio frequency radiation.

The proposed PCS system would operate as part of a low energy, low frequency network. The electromagnetic radiation frequencies emitted by the PCS antennas are considered non-ionizing radiation.

5. The Planning Commission held a duly advertised public hearing on August 15, 1996 to consider adoption of guidelines for the siting of wireless telecommunications services facilities in the City which would include standard conditions of approval for wireless communications facilities which are regulated by the FCC and required to meet the health and safety standards.

The Planning Commission, by Resolution No. 14182, adopted the proposed Wireless Telecommunications Services Facilities Siting Guidelines on August 15, 1996. The sample conditions of approval presented in the Guidelines form the basis for the development of conditions of approval for this Application and Motion.

The Guidelines identified preferences for types of buildings for these installations. The Project Site meets Location Preference Number 2, as it is a co-location site.

6. The proposed project will operate without on-site staff with a one or two person maintenance crew visiting the property once a month for an average of four hours to service and monitor the facility.
7. The Applicant has indicated that the proposed project and the wireless communications network will provide necessary emergency communication options in case telephone lines are damaged or inoperable as a result of natural disasters such as earthquakes. The Applicant has stated that the proposed digital personal communication service will improve the quality of service, will expand the array of communications services to include voice, video, and data transmissions, will improve the convenience of service, and will reduce the cost of wireless communication to the consumer. Because of the radio frequency used in this technology and the City's varied topography, approximately 40 antennae and transceiver installations ("cell sites") must be provided throughout the City by the Applicant to insure uninterrupted ("line of sight") transmission of the radio signals for uninterrupted ("seamless") coverage for customers. In order to provide this seamless coverage for its customers, the Applicant has established that it will need a cell site installation in the vicinity of the Project Site.
8. Under the provisions of Code Section 303, the Commission may authorize a Conditional Use after finding that the proposed use will provide a development that is necessary or desirable for and compatible with the neighborhood or the community, that such use will not be detrimental to the health, safety, convenience or general welfare of persons residing or working in the vicinity, or injurious to property, improvements or potential development in the vicinity and that such use will not adversely affect the General Plan. The proposed project will not adversely affect the General Plan. The proposed project complies with the criteria of Section 303 of the Code in that:
 - a. The proposed project would be generally desirable and compatible with the surrounding neighborhood because the project will not conflict with the existing uses of the property and will be of such size and nature to be compatible with the surrounding nature of the vicinity. The approval of this authorization has been found, first and foremost, to insure public safety, and insure that the placement of antennas and related support and protection features are so located, designed, and treated architecturally to minimize their visibility from public places, to avoid intrusion into public vistas, avoid disruption of the architectural design integrity of building and insure harmony with neighborhood character.

The proposed project will also provide necessary facilities for emergency transmission and improved communication for the neighborhood, community and the region.
 - b. The proposal will not be detrimental to the health and general welfare of persons residing or working in the vicinity nor is the proposed use injurious to property, improvements, or potential development in that:

- i. The proposed project must comply with all applicable Federal and State regulations to safeguard the health, safety and to ensure that persons residing or working in the vicinity will not be affected, and prevent harm to other personal property.

An evaluation of potential health effects from RF radiation, conducted by the Department of Public Health, has concluded that the proposed wireless transmission facilities will have no adverse health effects if operated in compliance with the FCC-adopted health and safety standards. The Department has received information that the proposed PCS system must be operated so as not to interfere with radio or television reception in order to comply with the provisions of its license under the FCC. The Department of Electricity and Telecommunications has advised this Department that operation of the proposed PCS system could interfere with the City's emergency 911 radio dispatching system currently used by the Police and Fire Departments. Conditions contained in Exhibit A of this Motion would insure that before the proposed PCS system begins operation, potential interference with the City's 911 dispatching system must be eliminated.

The Department is developing a database of all such wireless communications facilities operating or proposed for operation in the City and County of San Francisco. All Applicants are now required to submit information on the location and nature of all existing and approved wireless transmission facilities operated by the Project Sponsor. The goal of this effort is to foster public information as to the location of these facilities.

- ii. No increase in traffic volume is anticipated with the facilities operating unmanned, with a single maintenance crew visiting the site once a month.
- iii. While some noise and dust may result from the erection of the antennas and transceiver equipment, noise or noxious emissions from continued use are not likely to be significantly greater than ambient conditions due to the operation of the wireless communication network.

- 9. The proposed Project would implement the policies of the City's General Plan as follows:

Commerce and Industry Element

OBJECTIVES AND POLICIES
GENERAL / CITYWIDE

OBJECTIVE 1 MANAGE ECONOMIC GROWTH AND
CHANGE TO ENSURE ENHANCEMENT OF
THE TOTAL CITY LIVING AND WORKING
ENVIRONMENT.

POLICY 1 Encourage development which provides substantial
net benefits and minimizes undesirable

consequences. Discourage development which has substantial undesirable consequences that cannot be mitigated.

POLICY 2 Assure that all commercial and industrial uses meet minimum, reasonable performance standards.

A critical aspect of development management is to mitigate negative impacts created by new development: economic, aesthetic, physical, environmental, and social.

To ensure that commercial and industrial activities do not detract from the environment in which they locate, and may in fact benefit their surroundings, performance standards should be applied in evaluating new developments. The policies of the General Plan provide many of the standards to be used in evaluating development proposals. Other standards are found in various city ordinances and State and Federal laws. As necessary these standards should be reformed and additional standards developed.

OBJECTIVE 2 MAINTAIN AND ENHANCE A SOUND AND DIVERSE ECONOMIC BASE AND FISCAL STRUCTURE FOR THE CITY.

POLICY 1 Seek to retain existing commercial and industrial activity and to attract new such activity to the city.

POLICY 3 Maintain a favorable social and cultural climate in the city in order to enhance its attractiveness as a firm location.

OBJECTIVE 3 PROVIDE EXPANDED EMPLOYMENT OPPORTUNITIES FOR CITY RESIDENTS, PARTICULARLY THE UNEMPLOYED AND ECONOMICALLY DISADVANTAGED.

POLICY 1 Promote the attraction, retention and expansion of commercial and industrial firms which provide employment improvement opportunities for unskilled and semi-skilled workers.

POLICY 2 Promote measures designed to increase the number of San Francisco jobs held by San Francisco residents.

POLICY 3 Emphasize job training and retraining programs that will impart skills necessary for participation in the San Francisco labor market.

POLICY 4 Assist newly emerging economic activities.

INDUSTRY

OBJECTIVE 4 IMPROVE THE VIABILITY OF EXISTING INDUSTRY IN THE CITY AND THE ATTRACTIVENESS OF THE CITY AS A LOCATION FOR NEW INDUSTRY.

- POLICY 1 Maintain and enhance a favorable business climate in the city.
- POLICY 2 Promote and attract those economic activities with potential benefit to the City.

NEIGHBORHOOD COMMERCE

OBJECTIVE 6 MAINTAIN AND STRENGTHEN VIABLE NEIGHBORHOOD COMMERCIAL AREAS EASILY ACCESSIBLE TO CITY RESIDENTS.

- POLICY 1 Ensure and encourage the retention and provision of neighborhood-serving goods and services in the city's neighborhood commercial districts, while recognizing and encouraging diversity among the districts.
- POLICY 2 Promote economically vital neighborhood commercial districts which foster small business enterprises and entrepreneurship and which are responsive to economic and technological innovation in the marketplace and society.
- POLICY 3 Preserve and promote the mixed commercial-residential character in neighborhood commercial districts. Strike a balance between the preservation of existing affordable housing and needed expansion of commercial activity.

Residence Element

NEIGHBORHOOD ENVIRONMENT

OBJECTIVE 12 TO PROVIDE A QUALITY LIVING ENVIRONMENT.

- POLICY 1 Assure housing is provided with adequate public improvements, services and amenities.

Community Safety Element

OBJECTIVES AND POLICIES

EMERGENCY OPERATIONS

OBJECTIVE 3 ENSURE THE PROTECTION OF LIFE AND PROPERTY FROM THE EFFECTS OF FIRE OR NATURAL DISASTER THROUGH ADEQUATE EMERGENCY OPERATIONS PREPARATION.

- POLICY 1 Maintain a local agency for the provision of emergency services to meet the needs of San Francisco.
- POLICY 2 Develop and maintain viable, up-to-date in-house emergency operations plans, with necessary equipment, for operational capability of all emergency service agencies and departments.
- POLICY 3 Maintain and expand agreements for emergency assistance from other jurisdictions to ensure adequate aid in time of need.

- POLICY 4 Establish and maintain an adequate Emergency Operations Center.
- POLICY 5 Maintain and expand the city's fire prevention and fire-fighting capability.
- POLICY 6 Establish a system of emergency access routes for both emergency operations and evacuation.

10. City Planning Code Section 101.1 establishes eight priority planning policies and requires review of permits for consistency with said policies. The project complies with said policies in that:
 - a. No neighborhood-serving retail use would be displaced and the wireless communications network will enhance personal communication service;
 - b. No residential uses would be displaced or altered in any way by the granting of this authorization;
 - c. The proposed project would have no adverse impact on housing in the vicinity;
 - d. Due to the nature of the project and minimal maintenance or repair, municipal transit service would not be impeded and neighborhood parking would not be overburdened;
 - e. The Project would cause no displacement of industrial and service sector activity;
 - f. Compliance with applicable structural safety and seismic safety requirements would be considered during the building permit application review process;
 - g. The subject building is not historically or architecturally significant, and is not located in a designated historic district; and
 - h. Knudsen Bloom Park is to the west across San Bruno Avenue. The proposed antennas would be flush-mounted against the existing pole and the overall height of the pole would remain the same. Therefore, the proposed project would not have any adverse impact on any parks or open spaces.
11. The Commission hereby finds that approval of the Conditional Use authorization would promote the health, safety and welfare of the City.

DECISION

That based upon the Record, the submissions by the Applicant, the staff of the Department, and other interested parties, the oral testimony presented to this Commission at the public hearing, and all other written materials submitted by all parties, the Commission hereby APPROVES Conditional Use Application No. **97.043C** subject to the following conditions attached hereto as **EXHIBIT A** which is incorporated herein by reference as though fully set forth.

I hereby certify that the foregoing Motion was ADOPTED by the Planning Commission at its regular meeting of March 6, 1997.

Linda Avery,
Commission Secretary

AYES: Commissioners Antenore, Chinchilla, Joe, Martin, and Mills
NOES: None
EXCUSED: Commissioner Lowenberg
ADOPTED: March 6, 1997

EXHIBIT A

CONDITIONS OF APPROVAL

Conditions of Approval.

1. This authorization is granted to install up to four panel antennas on an existing monopole and one base transceiver station (the "facilities") on the ground adjacent to the building at 1435 San Bruno Avenue, Assessor's Block 4279, Lots 28 and 29; the facilities are to be installed in general conformity with the plans identified as EXHIBIT B, dated February 18, 1997, and submitted to the Commission for review on February 27, 1997.
2. Plan Drawings. Prior to the issuance of any building or electrical permits for the installation of the facilities, the Project Sponsor shall submit final scaled drawings for review and approval by the Planning Department ("Plan Drawings"). The Plan Drawings shall:
 - a.) Structure and Siting. Identify all facility related support and protection measures to be installed. This includes, but is not limited to, the location(s) and method(s) of placement, support, protection, screening, paint and/or other treatments of the antennas and other appurtenances to insure public safety, insure compatibility with urban design, architectural and historic preservation principles, and harmony with neighborhood character.
 - b.) For the Project Site, regardless of the ownership of the existing facilities: Identify the location of all existing antennas and facilities; and identify the location of all approved (but not installed) antennas and facilities.
 - c.) Emissions. Provide a report, subject to approval of the Zoning Administrator, that operation of the facilities in addition to ambient RF emission levels will not exceed adopted FCC standards with regard to human exposure in uncontrolled areas.
3. Project Implementation Report. The Project Sponsor shall prepare and submit to the Zoning Administrator a Project Implementation Report. The Project Implementation Report shall:
 - a.) identify the three-dimensional perimeter closest to the facility at which adopted FCC standards for human exposure to RF emissions in uncontrolled areas are satisfied;
 - b.) document testing that demonstrates that the facility will not cause any potential exposure to RF emissions that exceed adopted FCC emission standards for human exposure in uncontrolled areas.
 - c.) the Project Implementation Report shall compare test results for each test point with applicable FCC standards. Testing shall be conducted in compliance with FCC regulations governing the measurement of RF emissions and shall be conducted during normal business hours on a non-holiday week day with the subject equipment measured while operating at maximum power.
 - d.) Testing, Monitoring, and Preparation. The Project Implementation Report shall be prepared by a certified professional engineer or other technical expert approved by the Department. At the sole option of the Department, the Department (or its agents) may monitor the performance of testing required for preparation of the Project Implementation Report. The cost of such monitoring

- shall be borne by the Project Sponsor pursuant to the condition related to the payment of the City's reasonable costs.
- e.) Notification and Testing. The Project Implementation Report shall set forth the testing and measurements undertaken pursuant to Conditions 2 and 8.
 - f.) Approval. The Zoning Administrator shall request that the Certification of Final Completion for operation of the facility not be issued by the Department of Building Inspection until such time that the Project Implementation Report is approved by the Department for compliance with these conditions.
4. Notification prior to Project Implementation Report. The Project Sponsor shall undertake to inform and perform appropriate tests for residents of any dwelling units located within 25 feet of the transmitting antennae at the time of testing for the Project Implementation Report.
- a.) At least twenty calendar days prior to conducting the testing required for preparation of the Project Implementation Report, the Project Sponsor shall mail notice to the Department, as well as to the resident of any legal dwelling unit within 25 feet of a transmitting antenna, of the date on which testing will be conducted. The Applicant will submit a written affidavit attesting to this mail notice along with the mailing list.
 - b.) When requested in advance by a resident notified of testing pursuant to subsection (a), the Project Sponsor shall conduct testing of total power density of RF emissions within the residence of that resident on the date on which the testing is conducted for the Project Implementation Report.
5. Community Liaison. Within 10 days of the effective date of this authorization, the Project Sponsor shall appoint a community liaison officer to resolve issues of concern to neighbors and residents relating to the construction and operation of the facilities. Upon appointment, the Project Sponsor shall report in writing the name, address and telephone number of this officer to the Zoning Administrator. The Community Liaison Officer shall report to the Zoning Administrator what issues, if any, are of concern to the community and what issues have not been resolved by the Project Sponsor.
6. Installation. Within 10 days of the installation and operation of the facilities, the Project Sponsor shall confirm in writing to the Zoning Administrator that the facilities are being maintained and operated in compliance with applicable Building, Electrical and other Code requirements, as well as applicable FCC emissions standards.
7. Screening.
- a.) To the extent necessary to ensure compliance with adopted FCC regulations regarding human exposure to RF emissions, and upon the recommendation of the Zoning Administrator, the Project Sponsor shall:
 - i.) Modify the placement of the facilities;
 - ii.) install fencing, barriers or other appropriate structures or devices to restrict access to the facilities;
 - iii.) install multi-lingual signage, including the RF radiation hazard warning symbol identified in ANSI C95. 2-1982, to notify persons that the facility could cause exposure to RF emissions; or

- iv.) implement any other practice reasonably necessary to ensure that the facility is operated in compliance with adopted FCC RF emission standards.
- b.) To the extent necessary to minimize visual obtrusion and clutter, installations shall conform to the following standards:
 - i.) Antennas and back-up equipment shall be painted, fenced, landscaped or otherwise treated architecturally so as to minimize visual impacts;
 - ii) Rooftop installations shall be setback such that back-up facilities are not viewed from the street;
 - iii) Antennae attached to building facades shall be so placed, screened or otherwise treated to minimize any negative visual impact; and
 - iv) If WTS facilities are to be located on architecturally significant or historic buildings or structures, all facilities shall be integrated architecturally with the style and character of the structure or otherwise made unobtrusive;
 - v.) Although co-location of various companies' facilities may be desirable, a maximum number of antennas and back-up facilities on the Project Site shall be established, on a case-by-case basis, such that "antennae farms" or similar visual intrusions for the site and area is not created.
 - vi) The Project Sponsor shall remove antennae and equipment that has been out of service for a continuous period of six months.
- 8. Periodic Safety Monitoring. The Project Sponsor shall submit to the Zoning Administrator 10 days after installation of the facilities, and every two years thereafter, a certification attested to by a licensed engineer expert in the field of EMR/RF emissions, that the facilities are and have been operated within the then current applicable FCC standards for RF/EMF emissions.
- 9. Emissions Conditions. It is a continuing condition of this authorization that the facilities be operated in such a manner so as not to contribute to ambient RF/EMF emissions in excess of then current FCC adopted RF/EMF emission standards; violation of this condition shall be grounds for revocation.
- 10. Noise and Heat. The WTS facility, including power source and cooling facility, shall be operated at all times within the limits of the San Francisco Noise Ordinance. The WTS facility, including power source and cooling facility, shall not be operated so as to cause the generation of heat that adversely affects a building occupant.
- 11. Implementation and Monitoring Costs.
 - a.) The Project Sponsor, on an equitable basis with other WTS providers, shall pay the cost of preparing and adopting appropriate General Plan policies related to the placement of WTS facilities. Should future legislation be enacted to provide for cost recovery for planning, the Project Sponsor shall be bound by such legislation.
 - b.) The Project Sponsor or its successors shall be responsible for the payment of all reasonable costs associated with the monitoring of the conditions of approval contained in this authorization, including costs incurred by this Department, the Department of Public Health, the Department of Electricity and Telecommunications,

Office of the City Attorney, or any other appropriate City Department or agency pursuant to Planning Code Section 351(f)(2). The Planning Department shall collect such costs on behalf of the City.

- c.) The Project Sponsor shall be responsible for the payment of all fees associated with the installation of the subject facility which are assessed by the City pursuant to all applicable law.
12. All Conditions Basis for Revocation. The Project Sponsor or its successors shall comply fully with all conditions specified in this authorization. Failure to comply with any condition shall constitute grounds for revocation under the provisions of Planning Code sections 174, 176 and 303(d). The Zoning Administrator shall schedule a public hearing before the Planning Commission to receive testimony and other evidence to demonstrate a finding of a violation of a condition of the authorization of the use of the facility and, finding that violation, the Commission shall revoke the Conditional Use authorization. Such revocation by the Planning Commission is appealable to the Board of Supervisors.
- In the event that the project implementation report includes a finding that RF emissions for the site exceed FCC Standards in any uncontrolled location, the Zoning Administrator may require the Applicant to immediately cease and desist operation of the facility until such time that the violation is corrected to the satisfaction of the Zoning Administrator.
13. Complaints and Proceedings. Should any party complain to the Project Sponsor about the installation or operation of the facilities, which complaints are not resolved by the Project Sponsor, the Project Sponsor (or its appointed agent) shall advise the Zoning Administrator of the complaint and the failure to satisfactorily resolve such complaint. If the Zoning Administrator thereafter finds a violation of any provision of the City Planning Code and/or any condition of approval herein, the Zoning Administrator shall attempt to resolve such violation on an expedited basis with the Project Sponsor. If such efforts fail, the Zoning Administrator shall refer such complaints to the Commission for consideration at the next regularly scheduled public meeting.
14. Severability. If any clause, sentence, section or any part of these conditions of approval is for any reason held to be invalid, such invalidity shall not affect or impair other of the remaining provisions, clauses, sentences, or sections of these conditions. It is hereby declared to be the intent of the Commission that these conditions of approval would have been adopted had such invalid sentence, clause, or section or part thereof not been included herein.
15. Transfer of Operation. Any carrier/provider authorized by the Zoning Administrator or by the Planning Commission to operate a specific WTS installation may assign the operation of the facility to another carrier licensed by the FCC for that radio frequency provided that such transfer is made known to the Zoning Administrator in advance of such operation, and all conditions of approval for the subject installation are carried out by the new carrier/provider, and the authorizing Motion is recorded on the deed of the property stating the new carrier/provider and authorizing conditions of approval.

PLANNING COMMISSION

Case No. 97.043C
1435 San Bruno Avenue
Motion No. 14328
Exhibit A
Page 5

16. Compatibility with City Emergency Services. The facility shall not be operated, nor caused to transmit on or adjacent to any radio frequencies licensed to the City for emergency telecommunication services such that the City's emergency telecommunications system experiences interference, unless prior approval for such has been granted in writing by the City.
17. Recordation. The Property Owner shall execute and record these specified conditions as a Notice of Special Restrictions at the Office of the County Recorder/County Clerk.

kmp\1435san.mot

Permit Details Report

Report Date: 11/17/2022 5:43:06 PM

Application Number: 200906180755
 Form Number: 8
 Address(es): 4279 / 029 / 0 1431 ^{SAN} BRUNO AV
 Description: REPLACE 9 ANTENNAS 3 PER SECTOR, ADD 9 COAX 3 PER SECTOR
 Cost: \$5,000.00
 Occupancy Code: B
 Building Use: 46 - RADIO & TV STATIONS

Disposition / Stage:

Action Date	Stage	Comments
6/18/2009	TRIALGE	
6/18/2009	FILING	
6/18/2009	FILED	
11/2/2009	APPROVED	
11/2/2009	ISSUED	
2/5/2010	COMPLETE	Final Inspection/Approved

Contact Details:

Contractor Details:

License Number: 835251
 Name: WINSON HONG JR
 Company Name: MOMENTUM SERVICES CORP
 Address: 8839 N CEDAR #1 AV * FRESNO CA 93720-0000
 Phone:

Addenda Details:

Description:

Step	Station	Arrive	Start	In Hold	Out Hold	Finish	Checked By	Hold Description
1	INTAKE	6/18/09	6/18/09			6/18/09	BAZILE TARA	
2	CP-ZOC	6/22/09	6/22/09			6/22/09	BRUSATORI KEVIN	
3	BLDG	6/22/09	6/22/09			6/22/09	HUANG VIVIAN	
4	SFFD	6/18/09	6/18/09			6/18/09	HAYES JANICE	
5	HEALTH	6/19/09	6/19/09			6/19/09	FOSDAHL PATRICK	
6	CPB	11/2/09	11/2/09			11/2/09	GREEN EMILIE	

This permit has been issued. For information pertaining to this permit, please call 628-652-3450.

Appointments:

Appointment Date	Appointment AM/PM	Appointment Code	Appointment Type	Description	Time Slots
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Inspections:

Activity Date	Inspector	Inspection Description	Inspection Status
2/5/2010	Norman Gutierrez	FINAL INSPECT/APPRVD	FINAL INSPECT/APPRVD

Special Inspections:

Addenda No.	Completed Date	Inspected By	Inspection Code	Description	Remarks
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For information, or to schedule an inspection, call 628-652-3400 between 8:30 am and 3:00 pm.

Station Code Descriptions and Phone Numbers

[Online Permit and Complaint Tracking home page.](#)

Technical Support for Online Services

If you need help or have a question about this service, please visit our FAQ area.

Permit Details Report

Report Date: 11/17/2022 5:44:30 PM

Application Number: 201211295141
 Form Number: 3
 Address(es): 4279 / 029 / 0 143¹ SAN BRUNO AV

Description: TOWER-REMOVE 2 ANTENNAS, INSTALL 1 NEW ANTENNA & 2 RRU'S. BILLBOARD SIGN-REMOVE 4 ANTENNAS, INSTALL 2 NEW ANTENNAS & 4 RRU'S. EQUIPMENT AREA-REPLACE 2 EQUIPMENT CABINETS,REMOVE 1 EQUIP CABINET, REPLACE GPS ANTENNA, ADDITION OF FIBER SERVICE & ALL ASSOCIATED CABINETS,CONDUITS, ETC.

Cost: \$35,000.00
 Occupancy Code: B
 Building Use: 46 - RADIO & TV STATIONS

Disposition / Stage:

Action Date	Stage	Comments
11/29/2012	TRIAGE	
11/29/2012	FILING	
11/29/2012	FILED	
2/1/2013	PLANCHECK	
2/1/2013	APPROVED	
2/6/2013	ISSUED	
3/26/2015	EXPIRED	2503085 Stage updated from inspection

Contact Details:

Contractor Details:

License Number: 738367
 Name: OVERLAND CONTRACTING
 Company Name: OVERLAND CONTRACTING INC
 Address: 600 NGREENFIELD PKWY * GARNER NC 27529-0000
 Phone: 6502814675

Addenda Details:

Description:

Step	Station	Arrive	Start	In Hold	Out Hold	Finish	Checked By	Hold Description
1	CP-ZOC	11/29/12	11/29/12			11/29/12	BRUSATORI KEVIN	
2	CPB	11/29/12	11/29/12			11/29/12	YAN BRENDA	
3	BLDG	11/29/12	12/3/12			12/3/12	CHUN ROBERT	
4	HEALTH	12/3/12	12/5/12			12/5/12	FOSDAHL PATRICK	
5	SFFD	12/6/12	1/23/13			1/30/13	CHIN JEFF	approved 1.28.13
6	PPC	1/30/13	1/30/13			1/30/13	THAI SYLVIA	1/30/13: to CPB. 12/6/12: to SFFD.grs
7	CPB	1/30/13	2/1/13			2/6/13	CHAN AMARIS	1/31/13 APPROVED BY KS

This permit has been issued. For information pertaining to this permit, please call 628-652-3450.

Appointments:

Appointment Date	Appointment AM/PM	Appointment Code	Appointment Type	Description	Time Slots
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Inspections:

Activity Date	Inspector	Inspection Description	Inspection Status
3/26/2015	Brett Howard	FINAL INSPECT/APPRVD	EXPIRE

Special Inspections:

Addenda No.	Completed Date	Inspected By	Inspection Code	Description	Remarks
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For information, or to schedule an inspection, call 628-652-3400 between 8:30 am and 3:00 pm.

Station Code Descriptions and Phone Numbers

[Online Permit and Complaint Tracking home page.](#)

Technical Support for Online Services

If you need help or have a question about this service, please visit our FAQ area.

Permit Details Report**Report Date:** 11/17/2022 5:46:30 PM

Application Number: 201402078091

Form Number: 8

Address(es): 4279 / 029 / 0 1431^{SAN}
BRUNO AV

Description: TO OBTAIN FINAL INSPECTION FOR WORK APPROVED UNDER PA#2012.1129.5141. ALL WORK IS COMPLETED.

Cost: \$1.00

Occupancy Code: B

Building Use: 81 - SIGN

Disposition / Stage:

Action Date	Stage	Comments
2/7/2014	TRIAGE	
2/7/2014	FILING	
2/7/2014	FILED	
2/7/2014	APPROVED	
2/7/2014	ISSUED	
3/26/2015	COMPLETE	2503086 Final Inspection/Approved

Contact Details:**Contractor Details:**

License Number: 738367

Name: OVERLAND CONTRACTING

Company Name: OVERLAND CONTRACTING INC

Address: 600 NGREENFIELD PKWY * GARNER NC 27529-0000

Phone: 6502814675

Addenda Details:**Description:**

Step	Station	Arrive	Start	In Hold	Out Hold	Finish	Checked By	Hold Description
1	BLDG	2/7/14	2/7/14			2/7/14	GREENE EDWARD	
2	CPB	2/7/14	2/7/14			2/7/14	PASION MAY	

This permit has been issued. For information pertaining to this permit, please call 628-652-3450.

Appointments:

Appointment Date	Appointment AM/PM	Appointment Code	Appointment Type	Description	Time Slots
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Inspections:

Activity Date	Inspector	Inspection Description	Inspection Status
3/26/2015	Brett Howard	FINAL INSPECT/APPRVD	FINAL INSPECT/APPRVD
3/19/2015	Brett Howard	FINAL INSPECT/APPRVD	PRE-FINAL
1/27/2015	Brett Howard	FINAL INSPECT/APPRVD	NO ENTRY/NO PROGRESS

Special Inspections:

Addenda No.	Completed Date	Inspected By	Inspection Code	Description	Remarks
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For information, or to schedule an inspection, call 628-652-3400 between 8:30 am and 3:00 pm.

Station Code Descriptions and Phone Numbers

[Online Permit and Complaint Tracking](#) home page.**Technical Support for Online Services**

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Permit Details Report**Report Date:** 11/17/2022 5:47:03 PM

Application Number: 201505186571

Form Number: 8

Address(es): 4279 / 029 / 0 1431^{SAN}
BRUNO AV

Description: SPRINT TO INSTALL (1) NEW PANEL ANTENNA; 2 JUNCTION CYLINDERS AND 1 RRU ON (E) MONOPOLE; ADD 4 NEW BATTERIES INSIDE (E) CABINET, INSTALL 1 NEW DU CARD 3 RECTIFIER INSIDE (E) MMBS CABINET; PAINT POLE & EQUIP LIGHT SLATE GREY. SWAP 2 (E) PANEL ANTENNSA ON (E) BILLBOARD; AND INSTALL 2 N RRUS MAHER NA

Cost: \$20,000.00

Occupancy Code: B

Building Use: 82 - ANTENNA

Disposition / Stage:

Action Date	Stage	Comments
5/18/2015	TRIALGE	
5/18/2015	FILING	
5/18/2015	FILED	
7/10/2015	APPROVED	
7/10/2015	ISSUED	
7/20/2015	COMPLETE	2631817 Final Inspection/Approved

Contact Details:**Contractor Details:**

License Number: 897792

Name: ANDREW BADGER

Company Name: ELECTRIC TECH CONSTRUCTION INC

Address: 1910 MARK CT * CONCORD CA 94520-0000

Phone:

Addenda Details:**Description:**

Step	Station	Arrive	Start	In Hold	Out Hold	Finish	Checked By	Hold Description
1	INTAKE	5/18/15	5/18/15			5/18/15	CHAPMAN MARLA	
2	CP-ZOC	5/18/15	5/18/15			5/18/15	MASRY OMAR	
3	BLDG	5/18/15	5/18/15			5/18/15	CHEUNG JIMMY	
4	MECH	5/18/15	5/18/15			5/18/15	LAI JEFF	otc-approved
5	SFFD	5/18/15	5/18/15			5/18/15	NG ROGER	otc
6	HEALTH	5/28/15	5/28/15			5/28/15	ROSETTER PAUL	
7	CPB	7/10/15	7/10/15			7/10/15	LAURENTE YOLANDA	

This permit has been issued. For information pertaining to this permit, please call 628-652-3450.

Appointments:

Appointment Date	Appointment AM/PM	Appointment Code	Appointment Type	Description	Time Slots
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Inspections:

Activity Date	Inspector	Inspection Description	Inspection Status
7/20/2015	Brett Howard	FINAL INSPECT/APPRVD	FINAL INSPECT/APPRVD

Special Inspections:

Addenda No.	Completed Date	Inspected By	Inspection Code	Description	Remarks
-------------	----------------	--------------	-----------------	-------------	---------

For information, or to schedule an inspection, call 628-652-3400 between 8:30 am and 3:00 pm.

Station Code Descriptions and Phone Numbers

[Online Permit and Complaint Tracking](#) home page.**Technical Support for Online Services**

If you need help or have a question about this service, please visit our FAQ area.

Permit Details Report**Report Date:** 11/22/2022 12:36:47 PM

Application Number: 201505186569

Form Number: 8

Address(es): 4279 / 029 / 0 1431^{SAN} BRUNO AV

Description: VERIZON TO SWAP (6) PANEL ANTENNAS; REMOVE (E) 3 RRUS IN SHELTER, 3 TMAS AND (E) CABLE RUN; AND ADD 6 RRUS WITH A2 MODULES, 2 SURGE SUPPRESSION UNITS, AND 2 HYBRID CABLES. ALL NEW EQUIPMENT (ANTENNA, BRACKETS, CABLES, ETC) WILL BE PAINTED LIGHT SLATE GREY. MAHER NA

Cost: \$25,000.00

Occupancy Code: B

Building Use: 82 - ANTENNA

Disposition / Stage:

Action Date	Stage	Comments
5/18/2015	TRiage	
5/18/2015	FILING	
5/18/2015	FILED	
5/2/2016	APPROVED	
5/2/2016	ISSUED	
8/16/2016	COMPLETE	3025496 Final Inspection/Approved

Contact Details:**Contractor Details:**

License Number: 853651

Name: ROBERT DENTON

Company Name: BROKEN ARROW COMMUNICATIONS INC

Address: 4970 ALLISON PARKWAY * VACAVILLE CA 95688-0000

Phone:

Addenda Details:**Description:**

Step	Station	Arrive	Start	In Hold	Out Hold	Finish	Checked By	Hold Description
1	INTAKE	5/18/15	5/18/15			5/18/15	CHAPMAN MARLA	
2	CP-ZOC	1/15/16	1/15/16			1/15/16	ADINA SEEMA	Approved Verizon Wireless swap 6 of 9 antennas on monopole. Add cable-shrouds below each. Add 6 RRUs.
3	BLDG	5/18/15	5/18/15			5/18/15	NELSON LAU	approved Otc
4	BLDG	5/2/16	5/2/16			5/2/16	NELSON LAU	
5	MECH	5/18/15	5/18/15			5/18/15	LAI JEFF	otc-approved
6	SFFD	5/18/15	5/18/15			5/18/15	HANEY TOM	otc 5/18/15 by R. Ng; new set approved OTC 1/15/16 by T. Haney
7	HEALTH	5/19/15	5/19/15			5/19/15	FOSDAHL PATRICK	
8	CPB	5/2/16	5/2/16			5/2/16	KARCS EVELYN	

This permit has been issued. For information pertaining to this permit, please call 628-652-3450.

Appointments:

Appointment Date	Appointment AM/PM	Appointment Code	Appointment Type	Description	Time Slots
------------------	-------------------	------------------	------------------	-------------	------------

Inspections:

Activity Date	Inspector	Inspection Description	Inspection Status
8/16/2016	John Romaidis	FINAL INSPECT/APPRVD	FINAL INSPECT/APPRVD

Special Inspections:

Addenda No.	Completed Date	Inspected By	Inspection Code	Description	Remarks
-------------	----------------	--------------	-----------------	-------------	---------

For information, or to schedule an inspection, call 628-652-3400 between 8:30 am and 3:00 pm.

Station Code Descriptions and Phone Numbers

[Online Permit and Complaint Tracking home page.](#)**Technical Support for Online Services**

If you need help or have a question about this service, please visit our FAQ area.



Exhibit E

LETTER OF DETERMINATION

June 16, 2021

Paul B. Albritton
Mackenzie & Albritton LLP
155 Sansome Street, Suite 800
San Francisco, CA 94104

Record No.: **2021-003477ZAD**
Site Address: **Verizon Wireless – Section 6409 of the Spectrum Act of 2012**
Assessor’s Block/Lot: N/A
Zoning District: N/A
Staff Contact: Kalyani Agnihotri – 628-652-7454, kalyani.agnihotri@sfgov.org

Dear Mr. Albritton:

This letter is in response to your request for a Letter of Determination on behalf of Verizon Wireless regarding the applicability of Section 6409 of the Spectrum Act to applications under the Planning Code to modify existing, permitted Wireless Telecommunications Services (WTS) Facilities. The request seeks confirmation of the following: 1) the Planning Department’s Application process for all Section 6409 requests; 2) whether an entitlement (Certificate of Appropriateness, Minor Permit to Alter, or Conditional Use Authorization) is required; and 3) the submittal requirements for Section 6409 Applications.

The Planning Department has outlined its application process and the submittal requirements for Section 6409 applications below.

What is an “Eligible Facilities Request?”

Under regulations promulgated by the Federal Communications Commission (FCC),¹ an Eligible Facilities Request (EFR) is a request for modification of an existing tower or base station that does not substantially change the physical dimensions of such tower or base station, typically involving:

- collocation of new transmission equipment;
- removal of transmission equipment; or
- replacement of transmission equipment.

Section 6409 provides that “a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.”²

¹ See 47 C.F.R. § 1.6100(b)(3).

² 47 U.S.C. § 1455(a)(1).

The Planning Department considers an existing wireless facility for purposes of Section 6409 as a Macro WTS Facility³ that is principally permitted in a Commercial zoning district or conditionally authorized in a Neighborhood Commercial or Residential zoning district. A Micro WTS Facility⁴ is deemed as an accessory use to the principally or conditionally permitted use in a zoning district and is not considered an “existing wireless tower or base station” for the purposes of Section 6409.

Application and Review Process (see attached EFR Workflow)

- A Building Permit Application (BPA) is required to approve an EFR.
- The process for an EFR is ministerial in nature.
- The sponsor must include the attached EFR Checklist in its BPA submittal, in addition to the materials listed in the section below entitled “Application Materials required for EFR”. The proposed scope of work must satisfy the requirement that the proposed modification would not consist of a substantial change to the physical dimensions of the existing wireless tower or base station as the phrase is defined in the FCC regulations⁵ and Eligibility Requirements list below.
- The BPA must be submitted to the Department of Building Inspection as a “Form 8” permit, which is an over-the-counter (OTC) alteration permit. In addition to review by the Department of Building Inspection, the permit will also be reviewed by the Planning Department, Fire Department and Department of Public Health. The City’s standard OTC review process will be followed to review EFR applications.
- The Planning Department will review the BPA to verify whether it meets the Eligibility Requirements listed below. If the application meets the Eligibility Requirements, Planning will approve the application as an OTC approval and the application will be routed to the other City agencies for further review.

Eligibility Requirements for EFRs – Substantial Change Constraints

CRITERIA	TOWERS	BASE STATIONS
Height	20 feet or 10% of existing height	10 feet or 10% of existing height
Width	20 ft or tower width	6 feet
Equipment cabinets	Installation of more than the standard number of new equipment cabinets for the technology involved; 4 maximum	
	New ground cabinets if no pre-existing ground cabinets installed OR ground cabinets that are > 10% in height / overall volume of existing ground cabinets.	
Excavation	Within leased or owned area	Within leased or owned area
Concealment	Cannot defeat existing concealment elements	
Compliance with prior permit conditions	Changes must comply with all prior conditions except limits on height, width, number of equipment cabinets or excavation	

³ See San Francisco Planning Code Section 102 Definitions, Wireless Telecommunications Services (WTS) Facility, Macro

⁴ See San Francisco Planning Code Section 102 Definitions, Wireless Telecommunications Services (WTS) Facility, Micro

⁵ See 47 C.F.R. § 1.6100(b)(7).

Review Timeline and Process: The City has 30 days to provide notice of incompleteness of EFR applications

- The City has 60 days for approval or denial of EFR applications
- The sponsor may drop-in to the City’s Permit Center to submit an over-the-counter permit with no appointment, between the hours of 9:30AM and 11:30AM, Monday through Friday. Each sponsor is limited to one application per visit.
- The sponsor must submit the BPA, EFR, and all “Application Materials required for EFR” identified below during the drop-in visit in order to submit a complete over-the-counter permit.
- City Departments will make best efforts to review the application materials and either approve the permit or issue one or more notices of incompleteness within one business day. However, the City reserves the right to utilize up to 30 days to issue a notice of incompleteness and up to 60 days to complete its review of the application as allowed under FCC regulations.
- The sponsor may resubmit additional information requested by the City at any time for further over-the-counter review.

Application Materials Required for EFR: The City requires the following documents be provided in conjunction with all BPA that consist of EFRs:

- Form 8 Alteration Permit
- Two sets of architectural plans, including structural plans/calculations as deemed necessary by the Department of Building Inspection.
- EFR Checklist
- Photo simulations
- Radio frequency report
- DPH radio frequency approval letter
- Declaration of Intent for Section 106 Review for sites in Article 10 or 11 Landmark and Conservation Districts
- Proof that the existing site was legally installed and can be deemed an “existing wireless tower or base station”. The following documents are acceptable as proof:
 - Planning Commission approval motions and plans,
 - Copies of approved building permit plans, and/or
 - Copies of Certificates of Final Completion from the Department of Building Inspection, etc.

Please note that a Letter of Determination is a determination regarding the classification of uses and interpretation and applicability of the provisions of the Planning Code. This Letter of Determination is not a permit to commence any work or change occupancy. Permits from appropriate Departments must be secured before work is started or occupancy is changed.

Paul B. Albritton
Mackenzie & Albritton LLP
155 Sansome Street, Suite 800
San Francisco, CA 94104

June 16, 2021
Letter of Determination
Verizon Wireless – Section 6409 of the Spectrum Act

APPEAL: An appeal may be filed with the Board of Appeals within 15 days of the date of this letter if you believe this determination represents an error in interpretation of the Planning Code or abuse in discretion by the Zoning Administrator. Please contact the Board of Appeals in person at 49 South Van Ness Ave, Suite 1475, call (628) 652-1150, or visit www.sfgov.org/bdappeal.

Sincerely,



Scott F. Sanchez
Acting Zoning Administrator

cc: Mackenzie & Albritton LLP
William Sanders, Deputy City Attorney
Rich Hillis, Director of SF Planning Department
Patrick O’Riordan, Interim Director, Department of Building inspection
Dr. Grant Colfax, Director, Department of Public Health

Attachments: Eligible Facilities Request Workflow
Eligible Facilities Request Checklist

OFFICIAL COPY



APPROVED Dept. of Building Insp. - San Francisco

SEP 28 2022

SFFD INSP. FEES REQ.

FIRE

APPROVED FOR ISSUANCE

BLDG FORM 3/8

2022-02-28-8888

APPLICATION NUMBER APPROVAL NUMBER

201842576 BID

PATRICK MORAN DIRECTOR OF BUILDING INSPECTION

APPLICATION FOR BUILDING PERMIT ADDITIONS, ALTERATIONS OR REPAIRS

CITY AND COUNTY OF SAN FRANCISCO DEPARTMENT OF BUILDING INSPECTION

APPLICATION IS HEREBY MADE TO THE DEPARTMENT OF BUILDING INSPECTION OF SAN FRANCISCO FOR PERMISSION TO BUILD IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS SUBMITTED HERewith AND ACCORDING TO THE DESCRIPTION AND FOR THE PURPOSE HEREINAFTER SET FORTH.

FORM 3 [] OTHER AGENCIES REVIEW REQUIRED

FORM 8 [X] OVER-THE-COUNTER ISSUANCE

2 NUMBER OF PLAN SETS

DO NOT WRITE ABOVE THIS LINE

DATE FILED 2/28/22, FILING FEE RECEIPT NO., (1) STREET ADDRESS OF JOB 1431 SAN BRUNO AVE (815476), BLOCK & LOT 4279/029, PERMIT NO. 22094289, ISSUED SEP 28 2022, (2A) ESTIMATED COST OF JOB 33,500, (2B) REVISED COST \$33,500 N.P.A. 5/25/22

INFORMATION TO BE FURNISHED BY ALL APPLICANTS

LEGAL DESCRIPTION OF EXISTING BUILDING

(4A) TYPE OF CONSTR. RS, (5A) NO. OF STORIES OF OCCUPANCY: 1, (6A) NO. OF BASEMENTS AND CELLARS: 1, (7A) PRESENT USE: TELECOM, (8A) OCCUP. CLASS: B, (9A) NO. OF DWELLING UNITS: 2

DESCRIPTION OF BUILDING AFTER PROPOSED ALTERATION

(4) TYPE OF CONSTR. RS, (5) NO. OF STORIES OF OCCUPANCY: 1, (6) NO. OF BASEMENTS AND CELLARS: 1, (7) PROPOSED USE (LEGAL USE): TELECOM, (8) OCCUP. CLASS: B, (9) NO. OF DWELLING UNITS: 2

(10) IS AUTO RUNWAY TO BE CONSTRUCTED OR ALTERED? YES [] NO [X], (11) WILL STREET SPACE BE USED DURING CONSTRUCTION? YES [] NO [X], (12) ELECTRICAL WORK TO BE PERFORMED? YES [] NO [X], (13) PLUMBING WORK TO BE PERFORMED? YES [] NO [X]

(14) GENERAL CONTRACTOR: Ravi Ganapathisaran, ADDRESS: 510 Garcia Ave, ZIP: 94565, PHONE: 925 78971811, CALIF. LIC. NO.: 105824, EXPIRATION DATE: 9/30/2023

(15) OWNER (LESSOR CROSS OUT ONE): CROWN CASTLE (Verizon), ADDRESS: (415) 529-9868

(16) WRITE IN DESCRIPTION OF ALL WORK TO BE PERFORMED UNDER THIS APPLICATION (REFERENCE TO PLANS IS NOT SUFFICIENT)

REMOVE (9) Antenna, ADD (12) Antennas, REMOVE (12) RADIO UNITS, ADD (9) RADIO UNITS, INSTALL MOUNT MODIFICATIONS FOR Antennas.

ADDITIONAL INFORMATION

(17) DOES THIS ALTERATION CREATE ADDITIONAL HEIGHT OR STORY TO BUILDING? YES [] NO [X], (18) IF (17) IS YES, STATE NEW HEIGHT AT CENTER LINE OF FRONT, (19) DOES THIS ALTERATION CREATE DECK OR HORIZ. EXTENSION TO BUILDING? YES [] NO [X], (20) IF (19) IS YES, STATE NEW GROUND FLOOR AREA SQ. FT., (21) WILL SIDEWALK OVER SUB-SIDEWALK SPACE BE REPAIRED OR ALTERED? YES [] NO [X], (22) WILL BUILDING EXTEND BEYOND PROPERTY LINE? YES [] NO [X], (23) ANY OTHER EXISTING BLDG. ON LOT? (IF YES, SHOW ON LOT PLAN) YES [] NO [X], (24) DOES THIS ALTERATION CONSTITUTE A CHANGE OF OCCUPANCY? YES [] NO [X]

(25) ARCHITECT OR ENGINEER (DESIGN [] CONSTRUCTION [X]): Fuller bn Eng, ADDRESS: 1100 E Woodfield Rd. Ste 500, City: Sanhambury IL, CALIF. CERTIFICATE NO., (26) CONSTRUCTION LENDER (ENTER NAME AND BRANCH DESIGNATION IF ANY IF THERE IS NO KNOWN CONSTRUCTION LENDER, ENTER "UNKNOWN"): (412) 596-6335

IMPORTANT NOTICES

No change shall be made in the character of the occupancy or use without first obtaining a building permit...

No portion of building or structure or appurtenance used during construction is to be taller than 6'6" to any wall...

Pursuant to San Francisco Building Code, this building permit shall be voided on the job. The owner is responsible for approved plans and application being kept at building site.

On all lines as shown on drawings accompanying this application are assumed to be finished. If actual grade lines are not the same as shown, revised drawings showing correct grade lines, data and files, and complete details of retaining walls and wall footings must be submitted to this department for approval.

ANY SPECIFICATION REQUIRED HEREIN OR BY CODE MAY BE APPLICABLE. BUILDING NOT TO BE OCCUPIED UNTIL CERTIFICATE OF FINAL INSPECTION IS POSTED TO THE BUILDING OR PERMIT OF OCCUPANCY GRANTED. WORK REQUIRED.

APPLICANT OF THIS APPLICATION DOES NOT CONSTITUTE AN APPROVAL FOR THE ELECTRICAL, MECHANICAL OR PLUMBING INSTALLATIONS. A SEPARATE PERMIT FOR THE WORK AND PLUMBING MUST BE OBTAINED. SEPARATE PERMITS ARE REQUIRED IF ANSWER IS "YES" TO ANY OF ABOVE QUESTIONS (10) (11) (12) (13) (21) OR (22).

ALL CONTRACTING MATERIALS MUST HAVE A CLEARANCE OF NOT LESS THAN TWO FEET FROM ALL ELECTRICAL WIRES OR EQUIPMENT.

CHECK APPLICABLE BOX: [] OWNER, [] ARCHITECT, [] LESSOR, [] AGENT, [] CONTRACTOR, [] ENGINEER

APPLICANT'S CERTIFICATION

I HEREBY CERTIFY AND AGREE THAT IF A PERMIT IS ISSUED FOR THE CONSTRUCTION DESCRIBED IN THIS APPLICATION, ALL THE PROVISIONS OF THE PERMIT AND ALL LAWS AND ORDINANCES THERE TO WILL BE COMPLIED WITH.

NOTICE TO APPLICANT

HOLD HARMLESS CHANGE. The permittees by acceptance of the permit, agree to indemnify and hold harmless the City and County of San Francisco from and against any and all claims, demands and actions...

In conformity with the provisions of Section 2800 of the Labor Code of the State of California, the applicant shall have workers' compensation coverage under (I) or (II) designated below, or shall advise the City and County of San Francisco, and to assume the defense of the City and County of San Francisco against all such claims, demands or actions.

I hereby affirm under penalty of perjury one of the following declarations:

- 1. I have and will maintain in a certificate of consent to self-insure... 2. I have and will maintain workers' compensation insurance... 3. The cost of the work to be done is \$100 or less. 4. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California...

I certify as the owner for the work for the purpose of the permit for which this permit is issued, I will employ a contractor who complies with the workers' compensation laws of California and who, along with the contractor, will file a combined copy of this form with the City and County of San Francisco.

Signature of Applicant or Agent, Date 2/28/22

For technical issues or error messages email planning.webmaster@sfgov.org. Providing a screenshot, error message, and the action being taken can speed the response or correction greatly.

Home **Planning**



[Submit an Application](#)

[Search Applications/Permits](#)

[Review My Applications](#)

**Record 2015-006523PRL:
Project Light (PRL)
Record Status: Closed
Expiration Date: 01/31/2015**

[Record Info](#) ▼

For Documents:

- 1. Select the record of interest ***
- 2. Click Record Info**
- 3. Select Attachments**

* To list project records, click on Record Info and select Related Records.

Documents available online do not represent the full administrative record. To review the complete file for active records, please contact the assigned planner. To review closed records, please request the record via email at CPC-RecordRequest@sfgov.org.

Work Location

1435 SAN BRUNO AVE
, 94110

Record Details

Project Description:

Sprint Macro Wireless Telecommunications Services (WTS) Facility Modification. Add one panel antenna to existing monopole. Post installation site total to feature 9 antennas for Verizon Wireless (monopole); 2 antennas for Sprint (2 on monopole and 2 on billboard; and 3 antennas (not verified) for T-Mobile (acquired MetroPCS). Also replace both panel antennas for Sprint on billboard. Also paint entire monopole, antennas, brackets, and cabling light grey.

▼ More Details

☑ Related Contacts

Billing Contact information

Judith Justice

▣ **Application Information**

PROJECT DESCRIPTION

Building Permit Application Number: 201505186571

Alterations: Yes

PROJECT FEATURES

Other: Yes

Project Features Desc: Sprint Macro Wireless Telecommunications Services (WTS) Facility Modification

▣ **Application Information Table**

RELATED BUILDING PERMITS

Application Number: 201505186571

▣ **Parcel Information**

Parcel Number: 4279028 **Lot:** 028

Block:

4279

----- Forwarded message -----

From: **Robert Salem** <robertsalem@caldwellcompliance.com>

Date: Tue, Oct 11, 2022 at 11:13 AM

Subject: Verizon - 5 year plan - October 2022 - Confidential and Proprietary

To: CPC.Wireless <CPC.Wireless@sfgov.org>, Agnihotri, Kalyani (CPC) <kalyani.agnihotri@sfgov.org>, Jimenez, Sylvia (CPC) <sylvia.jimenez@sfgov.org>

Cc: Bond, Portia <portia.bond@verizonwireless.com>, Verizon NCAL NSB <vzw_nsb@caldwellcompliance.com>

Good Morning CPC Wireless Team,

On behalf of Verizon Wireless, Caldwell is submitting their updated 5 Year Plan for the City of San Francisco. Attached is the list of sites and the signed Verizon Letter.

Please let me know if you have any questions.

Thank you.

Robert

Robert Salem

Senior Environmental Compliance Manager

(949) 233-7277 - cell • 

robertsalem@caldwellcompliance.com



The Telecom & Regulatory Compliance Experts Since 2000

Site ID	Other/Prior Identification	Street Number	Full Street Name	Block (4 digits)	Lot (3 digits)	Latitude (NAD 83)	Longitude (NAD 83)	Number of Antennas
123825	POTRERO WEST	1435	SAN BRUNO	4279	028	37.751039	-122.403582	9

Zoning District	Height District	Type of Building & Stories	Type of Facility	Location of Primary Equipment Area (BTS)	Height to Top of Antenna	Frequencies Used	Wattage Output
M-1	40-X	N/A	Monopole	Ground	55.1	700, 850, AWS, PCS	468

Type of Services	If site slated for decommissioning, indicate date	Comments	Liaison Contact Information	Network Operations Center Phone Number
Voice, High Speed Data			Lex Munoz / 916-2054515	800-264-6620

**Crown Castle on behalf of
Verizon Wireless
Site BU Number – 815876
Application ID – VzW order 548000
Site Name – SF POTRERO WEST
Site Compliance Report**

**1431 San Bruno Avenue
San Francisco, CA 94107**

Latitude: N37-45-03.80
Longitude: W122-24-13.45
Structure Type: Monopole

Report generated date: May 20, 2021
Report by: Leo Romero
Customer Contact: Stacie Esposito

**Verizon Wireless will be compliant upon
completion of the remediation identified in
Section 2.2.**

© 2021 Site Safe, LLC, Vienna, VA

**Crown Castle on behalf of Verizon Wireless
SF POTRERO WEST - 815876
Radio Frequency (RF) Site Compliance Report**



1431 San Bruno Avenue, San Francisco, CA 94107



Table of Contents

1	EXECUTIVE SUMMARY	3
2	SITE COMPLIANCE	4
	2.1 SITE COMPLIANCE STATEMENT.....	4
	2.2 ACTIONS FOR SITE COMPLIANCE.....	4
3	ANALYSIS	5
	3.1 RF EXPOSURE DIAGRAM	5
4	ANTENNA INVENTORY	10
5	ENGINEER CERTIFICATION	14
	APPENDIX A – STATEMENT OF LIMITING CONDITIONS	15
	APPENDIX B – ASSUMPTIONS AND DEFINITIONS	16
	GENERAL MODEL ASSUMPTIONS	16
	USE OF GENERIC ANTENNAS	16
	DEFINITIONS.....	17
	APPENDIX C – RULES & REGULATIONS	19
	EXPLANATION OF APPLICABLE RULES AND REGULATIONS	19
	OCCUPATIONAL ENVIRONMENT EXPLAINED.....	19
	APPENDIX D – GENERAL SAFETY RECOMMENDATIONS	20
	ADDITIONAL INFORMATION	21
	APPENDIX E – REGULATORY BASIS	22
	FCC RULES AND REGULATIONS	22
	APPENDIX F – SAFETY PLAN AND PROCEDURES	24



1 Executive Summary

Crown Castle on behalf of Verizon Wireless has contracted with Site Safe, LLC (Sitesafe), an independent Radio Frequency (RF) regulatory and engineering consulting firm, to determine whether the proposed communications site, 815876 - SF POTRERO WEST, located at 1431 San Bruno Avenue, San Francisco, CA, is in compliance with Federal Communications Commission (FCC) rules and regulations for RF exposure.

This report contains a detailed summary of the RF environment at the site including:

- Diagram of the site
- Inventory of the make / model of all antennas
- Theoretical MPE based on modeling

This report addresses exposure to radio frequency electromagnetic fields in accordance with FCC rules and regulations for all individuals, classified in two groups, "Occupational or Controlled" and "General Public or Uncontrolled."

Verizon Wireless will be compliant with FCC rules and regulations, as described in OET Bulletin 65, **upon implementation of the proposed remediation**. The corrective actions needed to make this site compliant are located in Section 2.2.

Verizon Wireless proposes to make modifications to an existing site. The proposed antennas are noted as "Proposed" in the antenna table under Section 4.

This document and the conclusions herein are based on the information provided by Crown Castle on behalf of Verizon Wireless.

If you have any questions regarding RF safety and regulatory compliance, please do not hesitate to contact Sitesafe's Customer Support Department at (703) 276-1100.

2 Site Compliance

2.1 Site Compliance Statement

Upon evaluation of the cumulative RF exposure levels from all operators at this site, Sitesafe has determined that:

Verizon Wireless will be compliant with FCC rules and regulations, as described in OET Bulletin 65, **upon implementation of the proposed remediation.** The corrective actions needed to make this site compliant are located in Section 2.2.

The compliance determination is based on theoretical modeling, RF signage placement recommendations, proposed antenna inventory and/or the level of restricted access to the antennas at the site. Any deviation from the Verizon Wireless proposed deployment plan could result in the site being rendered non-compliant.

2.2 Actions for Site Compliance

Based on common industry practice and our understanding of FCC and OSHA requirements, this section provides a statement of recommendations for site compliance. If required, RF alert signage recommendations have been proposed based on theoretical analysis of MPE levels. Where applicable, barriers can consist of locked doors, fencing, railing, rope, chain, paint striping or tape, combined with RF alert signage.

Verizon Wireless will be compliant if the following changes are implemented:

Base of Monopole

- Install a Warning sign.
- Remove the existing Caution sign.

Note: The compound gate or the access point must be locked/restricted for the site to be in compliance.

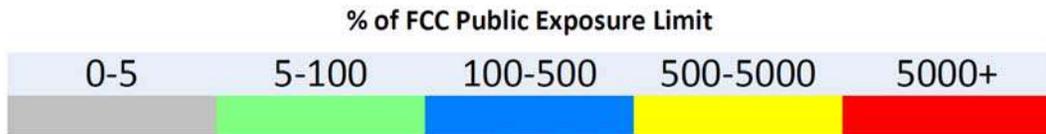
Note: Ensure all existing signage documented in this report still exists on site unless otherwise indicated.

3 Analysis

3.1 RF Exposure Diagram

The RF diagram(s) below display theoretical percentage of the Maximum Permissible Exposure for all systems at the site. These diagrams use modeling as prescribed in OET Bulletin 65 and assumptions detailed in Appendix B.

The key at the bottom of each diagram indicates if percentages displayed are referenced to FCC **General Public** Maximum Permissible Exposure (MPE) limits. Color coding on the diagram is as follows:



This table displays the maximum theoretical percentage of the FCC’s General Public MPE limits:

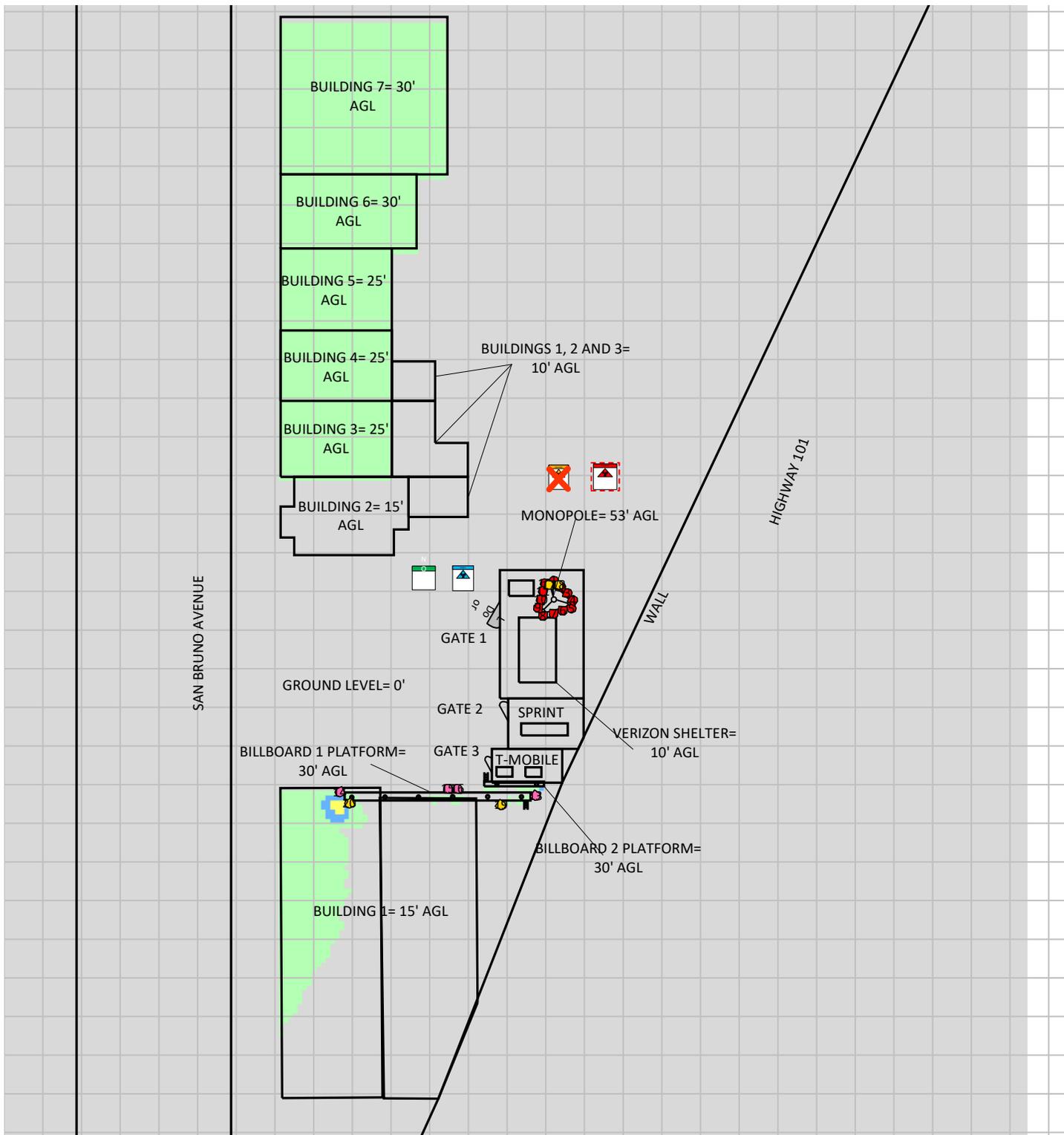
	General Public Levels:	
Exposure Type:	Maximum	Spatial Average
Reference Level:	Antenna Level	Ground
Verizon Wireless:	58,910.0%	<1%
Composite:	58,912.0%	<1%

Note: On the diagrams shown below, each level is marked with a height. For all diagrams that are marked as *Spatial average 0' – 6'*, the modeling program will spatially average the exposure within the area six feet above each set level. This provides an accurate spatial average of the percentage of the FCC’s MPE limits within an accessible area.

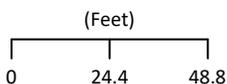
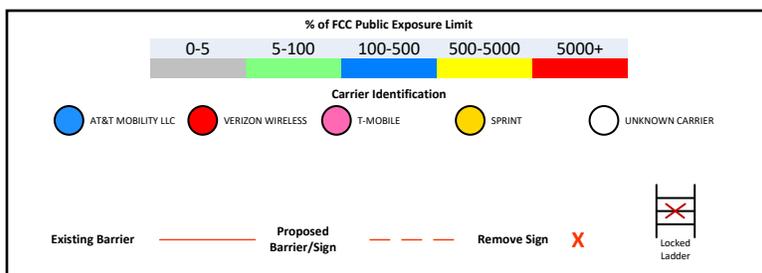
In the RF exposure simulations below, all heights are reflected with respect to the main site level. In most rooftop cases, this is the height of the main rooftop, and in other cases, this may be ground level. Each different area, rooftop, or platform level is labeled with its height relative to the main site level. Exposure is calculated appropriately based on the relative height and location of that area to all antennas. The analyzed elevations in the RF exposure simulations are as follows:

- Ground Level = 0'
- Buildings 1 and 2 = 15'
- Buildings 3, 4 and 5 = 25'
- Buildings 6 and 7 = 30'
- Billboard Platforms = 30'
- Verizon Shelter = 10'

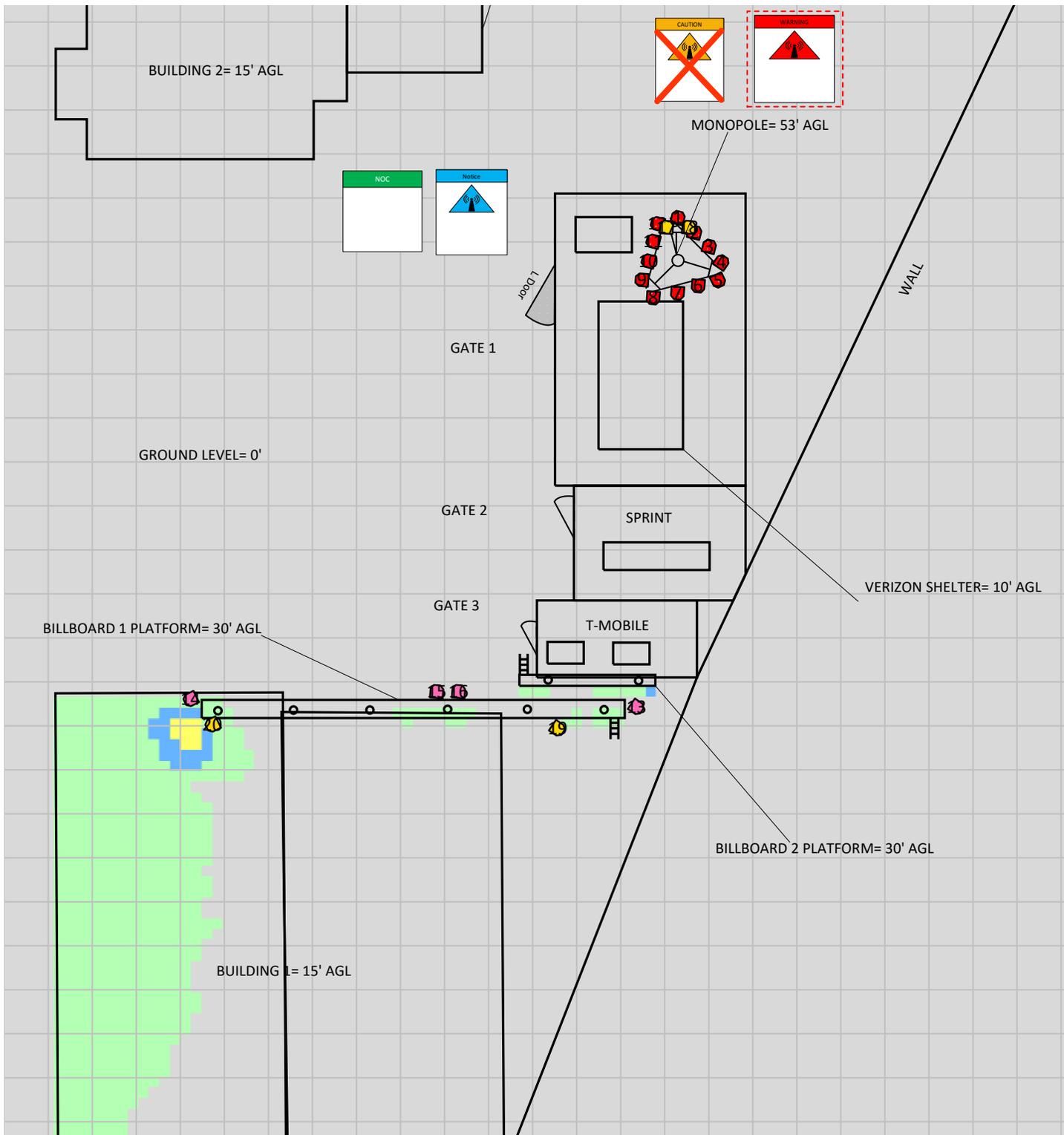
RF Exposure Simulation For: SF POTRERO WEST Composite View



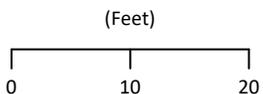
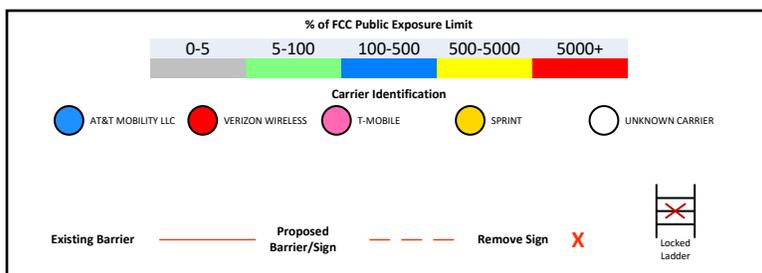
% of FCC Public Exposure Limit
Spatially Averaged



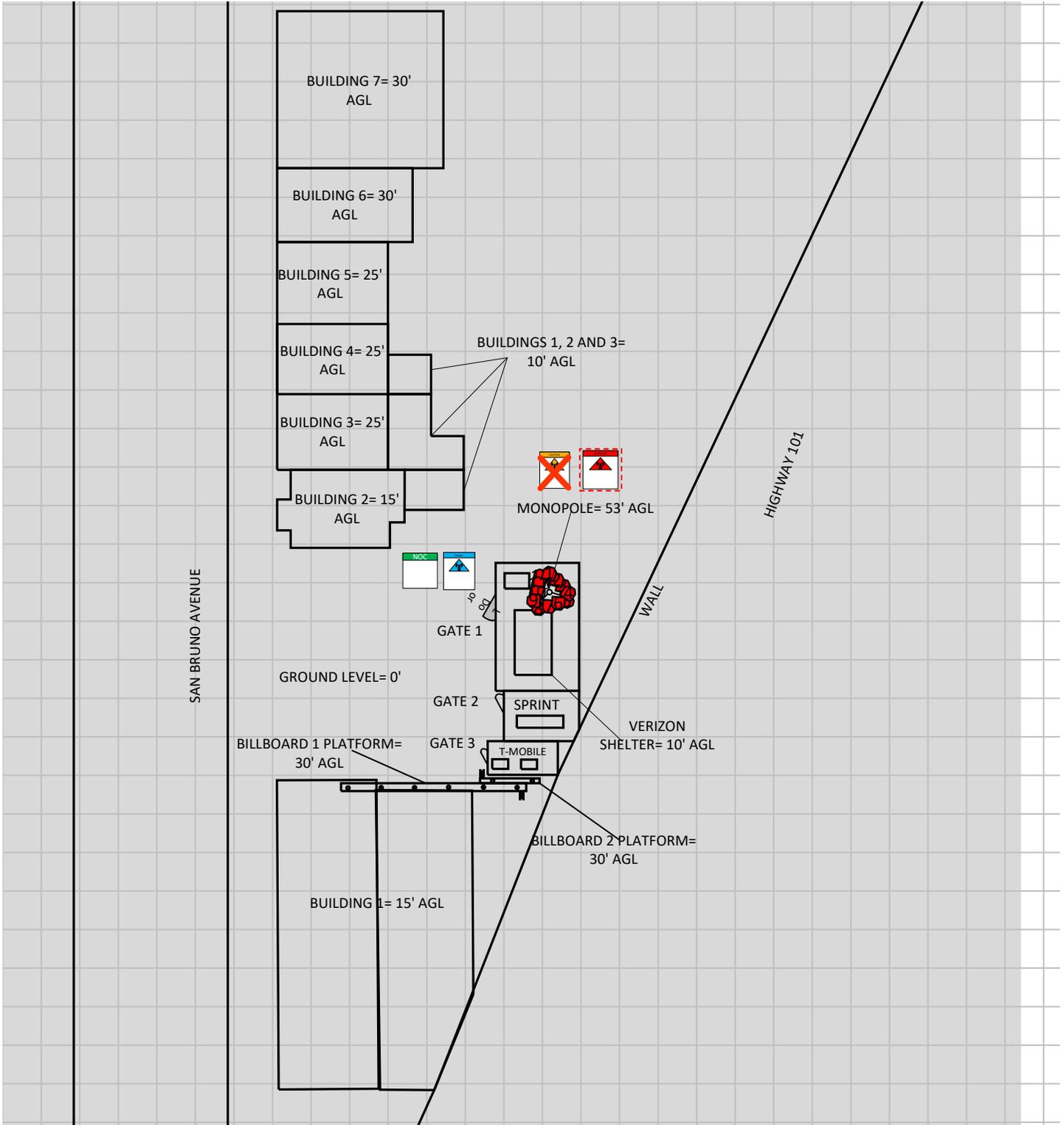
RF Exposure Simulation For: SF POTRERO WEST Detail View



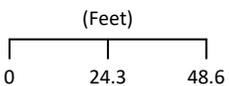
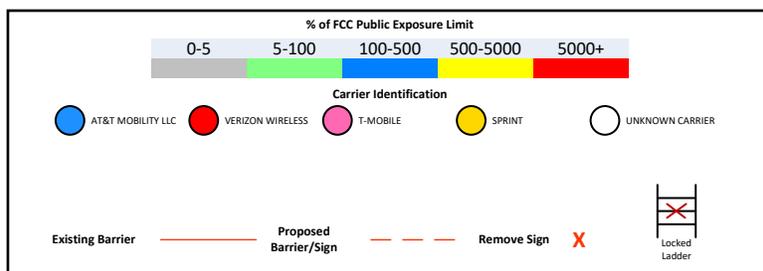
% of FCC Public Exposure Limit
Spatially Averaged



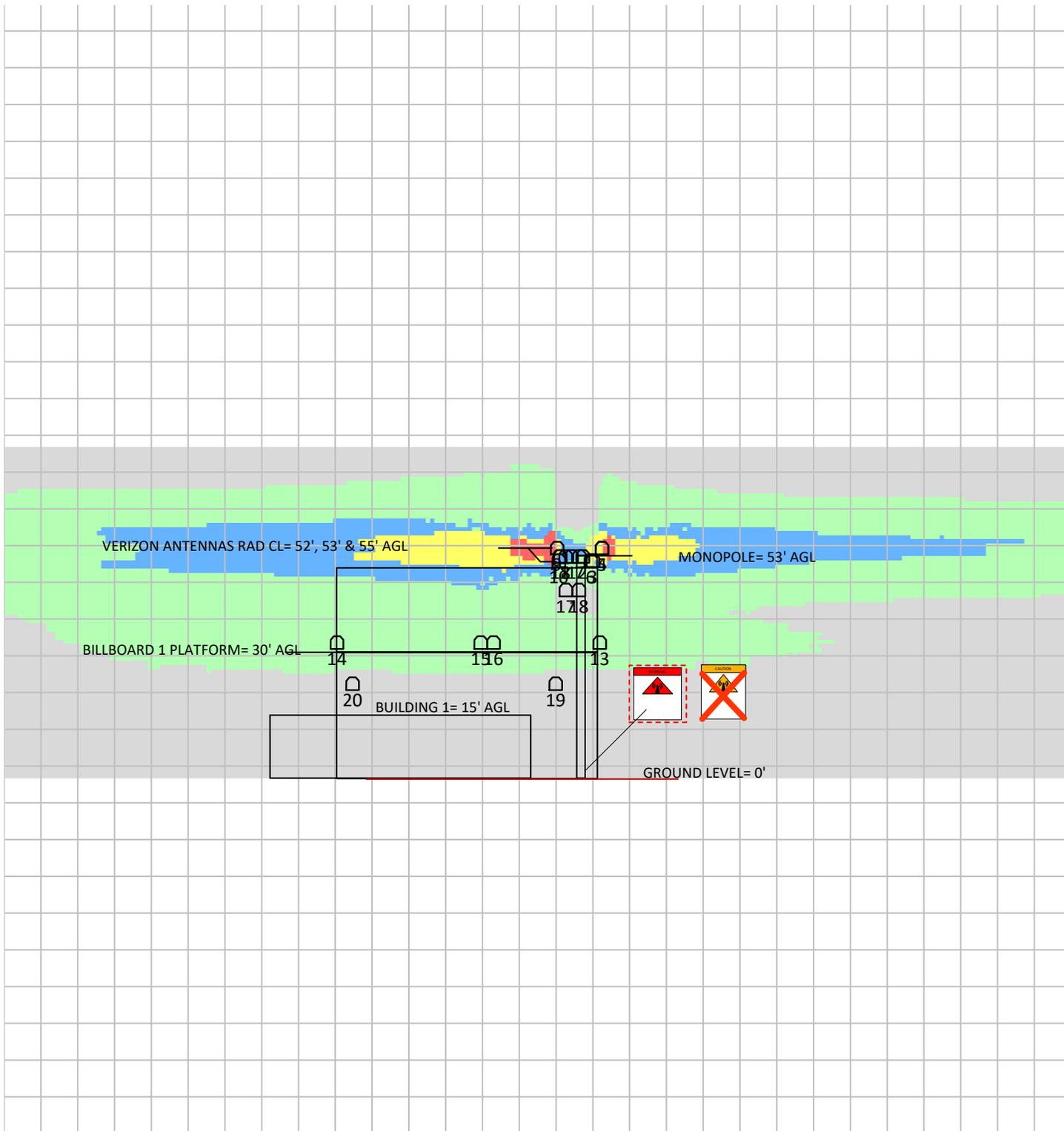
RF Exposure Simulation For: SF POTRERO WEST Verizon Wireless Contribution



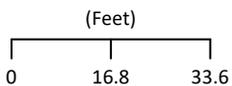
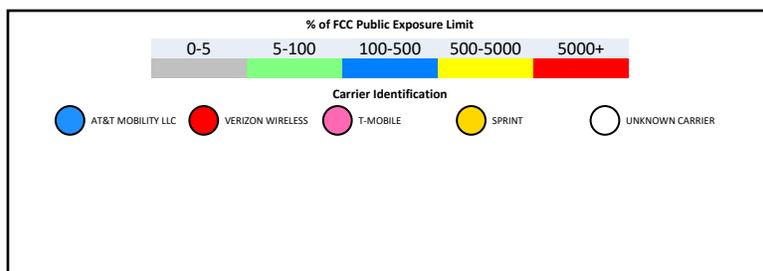
% of FCC Public Exposure Limit
Spatially Averaged



RF Exposure Simulation For: SF POTRERO WEST Elevation View



% of FCC Public Exposure Limit
Single Level (0)



4 Antenna Inventory

The Antenna Inventory shows all transmitting antennas at the site. This inventory was provided by the customer and was utilized by Sitesafe to perform theoretical modeling of RF exposure. The inventory coincides with the site diagrams in this report, identifying each antenna's location at 815876 - SF POTRERO WEST. The antenna information collected includes the following information:

- Licensee or wireless operator name
- Frequency or frequency band
- Transmitter power – Transmitter Power Output ("TPO"), Effective Radiated Power ("ERP"), or Equivalent Isotropic Radiated Power ("EIRP")
- Antenna manufacturer make, model, and gain

For other carriers at this site, the use of "Generic" as an antenna model, or "Unknown" for an operator means the information with regard to carrier, their FCC license and/or antenna information was not available nor could it be secured while on site. Equipment, antenna models and nominal transmit power were used for modeling, based on past experience with radio service providers.



The following antenna inventory was provided by the customer and was utilized to create the site model diagrams:

Ant ID	Operator	Antenna Make and Model	Ant Type	TX Freq (MHz)	Technology	Az (Deg)	Horizontal Beamwidth (Deg)	Ant Length (ft)	Ant Gain (dBd)	Power	Power Type	Power Units	TX Count	Misc Loss	Total ERP (Watts)	Z (ft) (AGL)	MDT (Deg)	EDT (Deg)
1	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	751	LTE	10	66.0	6	11.46	80.00	TPO	Watt	1	0.00	1119.7	53	0	0
1	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	850	LTE	10	64.0	6	12.76	80.00	TPO	Watt	1	0.00	1510.4	53	0	0
1	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	1900	LTE	10	60.0	6	15.06	160.00	TPO	Watt	1	0.00	5130	53	0	0
2	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	751	LTE	10	66.0	6	11.46	80.00	TPO	Watt	1	0.00	1119.7	53	0	0
2	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	850	LTE	10	64.0	6	12.76	80.00	TPO	Watt	1	0.00	1510.4	53	0	0
2	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	2100	LTE	10	62.0	6	14.76	160.00	TPO	Watt	1	0.00	4787.6	53	0	0
3	VERIZON WIRELESS (Proposed)	Ericsson 4408	Panel	3550	LTE/CBRS	10	65.0	0.7	9.41	20.00	TPO	Watt	1	0.00	174.6	52	0	0
4	VERIZON WIRELESS (Proposed)	Ericsson AIR6449	Panel	3700	5G	30	12.0	2.8	23.55	320.00	TPO	Watt	1	0.00	72468.6	55	0	0
5	VERIZON WIRELESS (Proposed)	Ericsson AIR6449	Panel	3700	5G	150	12.0	2.8	23.55	320.00	TPO	Watt	1	0.00	72468.6	55	0	0
6	VERIZON WIRELESS (Proposed)	Ericsson 4408	Panel	3550	LTE/CBRS	180	65.0	0.7	9.41	20.00	TPO	Watt	1	0.00	174.6	52	0	0
7	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	751	LTE	180	66.0	6	11.46	80.00	TPO	Watt	1	0.00	1119.7	53	0	0
7	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	850	LTE	180	64.0	6	12.76	80.00	TPO	Watt	1	0.00	1510.4	53	0	0
7	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	1900	LTE	180	60.0	6	15.06	160.00	TPO	Watt	1	0.00	5130	53	0	0
8	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	751	LTE	180	66.0	6	11.46	80.00	TPO	Watt	1	0.00	1119.7	53	0	0
8	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	850	LTE	180	64.0	6	12.76	80.00	TPO	Watt	1	0.00	1510.4	53	0	0
8	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	2100	LTE	180	62.0	6	14.76	160.00	TPO	Watt	1	0.00	4787.6	53	0	0
9	VERIZON WIRELESS (Proposed)	Ericsson AIR6449	Panel	3700	5G	270	12.0	2.8	23.55	320.00	TPO	Watt	1	0.00	72468.6	55	0	0
10	VERIZON WIRELESS (Proposed)	Ericsson 4408	Panel	3550	LTE/CBRS	280	65.0	0.7	9.41	20.00	TPO	Watt	1	0.00	174.6	52	0	0



Ant ID	Operator	Antenna Make and Model	Ant Type	TX Freq (MHz)	Technology	Az (Deg)	Horizontal Beamwidth (Deg)	Ant Length (ft)	Ant Gain (dBd)	Power	Power Type	Power Units	TX Count	Misc Loss	Total ERP (Watts)	Z (ft) (AGL)	MDT (Deg)	EDT (Deg)
11	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	751	LTE	280	66.0	6	11.46	80.00	TPO	Watt	1	0.00	1119.7	53	0	0
11	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	850	LTE	280	64.0	6	12.76	80.00	TPO	Watt	1	0.00	1510.4	53	0	0
11	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	1900	LTE	280	60.0	6	15.06	160.00	TPO	Watt	1	0.00	5130	53	0	0
12	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	751	LTE	280	66.0	6	11.46	80.00	TPO	Watt	1	0.00	1119.7	53	0	0
12	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	850	LTE	280	64.0	6	12.76	80.00	TPO	Watt	1	0.00	1510.4	53	0	0
12	VERIZON WIRELESS (Proposed)	Commscope NNHH-65B-R4	Panel	2100	LTE	280	62.0	6	14.76	160.00	TPO	Watt	1	0.00	4787.6	53	0	0
13	T-MOBILE	RFS APX16DWV-16DWVS-C	Panel	1900		120	65.0	4.7	16.27	160.00	TPO	Watt	1	0.00	6778.3	32.5	0	0
13	T-MOBILE	RFS APX16DWV-16DWVS-C	Panel	2100		120	65.0	4.7	16.27	160.00	TPO	Watt	1	0.00	6778.3	32.5	0	0
14	T-MOBILE	RFS APX16DWV-16DWVS-C	Panel	1900		240	65.0	4.7	16.27	160.00	TPO	Watt	1	0.00	6778.3	32.5	0	0
14	T-MOBILE	RFS APX16DWV-16DWVS-C	Panel	2100		240	65.0	4.7	16.27	160.00	TPO	Watt	1	0.00	6778.3	32.5	0	0
15	T-MOBILE	RFS APX16DWV-16DWVS-C	Panel	1900		0	65.0	4.7	16.27	160.00	TPO	Watt	1	0.00	6778.3	32.5	0	0
15	T-MOBILE	RFS APX16DWV-16DWVS-C	Panel	2100		0	65.0	4.7	16.27	160.00	TPO	Watt	1	0.00	6778.3	32.5	0	0
16	T-MOBILE	Generic	Panel	1900		0	65.0	4.6	15.43	160.00	TPO	Watt	1	0.00	5586.2	32.5	0	0
16	T-MOBILE	Generic	Panel	2100		0	65.0	4.6	15.23	160.00	TPO	Watt	1	0.00	5334.8	32.5	0	0
17	SPRINT (T-Mobile)	RFS APXVSPP18-C-A20	Panel	862		0	65.0	6	13.37	100.00	TPO	Watt	1	0.00	2172.7	45	0	0
17	SPRINT (T-Mobile)	RFS APXVSPP18-C-A20	Panel	1900		0	65.0	6	16.27	90.00	TPO	Watt	1	0.00	3812.8	45	0	0
17	SPRINT (T-Mobile)	RFS APXVSPP18-C-A20	Panel	1990		0	65.0	6	16.27	90.00	TPO	Watt	1	0.00	3812.8	45	0	0
18	SPRINT (T-Mobile)	Kmw ET-X-WM-18-65-8P	Panel	2500		0	72.0	5.1	15.86	160.00	TPO	Watt	1	0.00	6167.7	45	0	0
19	SPRINT (T-Mobile)	RFS APXVSPP18-C-A20	Panel	862		120	65.0	6	13.37	100.00	TPO	Watt	1	0.00	2172.7	22.7	0	0
19	SPRINT (T-Mobile)	RFS APXVSPP18-C-A20	Panel	1900		120	65.0	6	16.27	90.00	TPO	Watt	1	0.00	3812.8	22.7	0	0
19	SPRINT (T-Mobile)	RFS APXVSPP18-C-A20	Panel	1990		120	65.0	6	16.27	90.00	TPO	Watt	1	0.00	3812.8	22.7	0	0



Ant ID	Operator	Antenna Make and Model	Ant Type	TX Freq (MHz)	Technology	Az (Deg)	Horizontal Beamwidth (Deg)	Ant Length (ft)	Ant Gain (dBd)	Power	Power Type	Power Units	TX Count	Misc Loss	Total ERP (Watts)	Z (ft) (AGL)	MDT (Deg)	EDT (Deg)
20	SPRINT (T-Mobile)	RFS APXVSP18-C-A20	Panel	862		240	65.0	6	13.37	100.00	TPO	Watt	1	0.00	2172.7	22.7	0	0
20	SPRINT (T-Mobile)	RFS APXVSP18-C-A20	Panel	1900		240	65.0	6	16.27	90.00	TPO	Watt	1	0.00	3812.8	22.7	0	0
20	SPRINT (T-Mobile)	RFS APXVSP18-C-A20	Panel	1990		240	65.0	6	16.27	90.00	TPO	Watt	1	0.00	3812.8	22.7	0	0

Note: The Z reference indicates antenna height above the ground level (AGL). ERP values provided by the client and used in the modeling may be greater than are currently deployed. For additional modeling information, refer to Appendix B. Proposed equipment is tagged as *(Proposed)* under *Operator* or *Antenna Make and Model*.



5 Engineer Certification

The professional engineer whose seal appears on the cover of this document hereby certifies and affirms:

That I am registered as a Professional Engineer in the jurisdiction indicated in the professional engineering stamp on the cover of this document; and

That I am an employee of Site Safe, LLC, in Vienna, Virginia, at which place the staff and I provide RF compliance services to clients in the wireless communications industry; and

That I am thoroughly familiar with the Rules and Regulations of the Federal Communications Commission (FCC) as well as the regulations of the Occupational Safety and Health Administration (OSHA), both in general and specifically as they apply to the FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields; and

That I have thoroughly reviewed this Site Compliance Report and believe it to be true and accurate to the best of my knowledge as assembled by and attested to by Leo Romero.

May 20, 2021



Appendix A – Statement of Limiting Conditions

Sitesafe will not be responsible for matters of a legal nature that affect the site or property.

Due to the complexity of some wireless sites, Sitesafe performed this analysis and created this report utilizing best industry practices and due diligence. Sitesafe cannot be held accountable or responsible for anomalies or discrepancies due to actual site conditions (i.e., mislabeling of antennas or equipment, inaccessible cable runs, inaccessible antennas or equipment, etc.) or information or data supplied by Verizon Wireless, the site manager, or their affiliates, subcontractors or assigns.

Sitesafe has provided computer generated model(s) in this Site Compliance Report to show approximate dimensions of the site, and the model is included to assist the reader of the compliance report to visualize the site area, and to provide supporting documentation for Sitesafe's recommendations.

Sitesafe may note in the Site Compliance Report any adverse physical conditions, such as needed repairs, observed during the survey of the subject property or that Sitesafe became aware of during the normal research involved in performing this survey. Sitesafe will not be responsible for any such conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because Sitesafe is not an expert in the field of mechanical engineering or building maintenance, the Site Compliance Report must not be considered a structural or physical engineering report.

Sitesafe obtained information used in this Site Compliance Report from sources that Sitesafe considers reliable and believes them to be true and correct. Sitesafe does not assume any responsibility for the accuracy of such items that were furnished by other parties. When conflicts in information occur between data provided by a second party and physical data collected by Sitesafe, the physical data will be used.



Appendix B – Assumptions and Definitions

General Model Assumptions

In this site compliance report, it is assumed that all antennas are operating at **full power at all times**. Software modeling was performed for all transmitting antennas located on the site. Sitesafe has further assumed a 100% duty cycle and maximum radiated power.

The site has been modeled with these assumptions to show the maximum RF energy density. Sitesafe believes this to be a *worst-case* analysis, based on best available data. Areas modeled to predict exposure greater than 100% of the applicable MPE level may not actually occur but are shown as a *worst-case* prediction that could be realized real time. Sitesafe believes these areas to be safe for entry by occupationally trained personnel utilizing appropriate personal protective equipment (in most cases, a personal monitor).

Thus, at any time, if power density measurements were made, we believe the real-time measurements would indicate levels below those depicted in the RF exposure diagram(s) in this report. By modeling in this way, Sitesafe has conservatively shown exclusion areas – areas that should not be entered without the use of a personal monitor, carriers reducing power, or performing real-time measurements to indicate real-time exposure levels.

Use of Generic Antennas

For the purposes of this report, the use of "Generic" as an antenna model, or "Unknown" for an operator means the information about a carrier, their FCC license and/or antenna information was not provided and could not be obtained while on site. In the event of unknown information, Sitesafe will use our industry specific knowledge of equipment, antenna models, and transmit power to model the site. If more specific information can be obtained for the unknown measurement criteria, Sitesafe recommends remodeling of the site utilizing the more complete and accurate data. Information about similar facilities is used when the service is identified and associated with a particular antenna. If no information is available regarding the transmitting service associated with an unidentified antenna, using the antenna manufacturer's published data regarding the antenna's physical characteristics makes more conservative assumptions.

Where the frequency is unknown, Sitesafe uses the closest frequency in the antenna's range that corresponds to the highest MPE, resulting in a conservative analysis.

Definitions

5% Rule – The rules adopted by the FCC specify that, in general, at multiple transmitter sites actions necessary to bring the area into compliance with the guidelines are the shared responsibility of all licensees whose transmitters produce field strengths or power density levels at the area in question in excess of 5% of the exposure limits. In other words, any wireless operator that contributes 5% or greater of the MPE limit in an area that is identified to be greater than 100% of the MPE limit is responsible for taking corrective actions to bring the site into compliance.

Compliance – The determination of whether a site complies with FCC standards with regards to Human Exposure to Radio Frequency Electromagnetic Fields from transmitting antennas.

Decibel (dB) – A unit for measuring power or strength of a signal.

Duty Cycle – The percent of pulse duration to the pulse period of a periodic pulse train. Also, may be a measure of the temporal transmission characteristic of an intermittently transmitting RF source such as a paging antenna by dividing average transmission duration by the average period for transmission. A duty cycle of 100% corresponds to continuous operation.

Effective (or Equivalent) Isotropic Radiated Power (EIRP) – The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna.

Effective Radiated Power (ERP) – The product of the power supplied to the antenna and the antenna gain in a given direction relative to a half-wave dipole antenna.

Gain (of an antenna) – The ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power density at the same distance. When not specified otherwise, the gain refers to the direction of maximum radiation. Gain may be considered for a specified polarization. Gain may be referenced to an isotropic antenna (dBi) or a half-wave dipole (dBd) antenna.

General Population/Uncontrolled Environment – Defined by the FCC as an area where RF exposure may occur to persons who are *unaware* of the potential for exposure and who have no control over their exposure. General Population is also referenced as General Public.

Generic Antenna – For the purposes of this report, the use of “Generic” as an antenna model means the antenna information was not provided and could not be obtained while on site. In the event of unknown information, Sitesafe will use its industry specific knowledge of antenna models to select a worst-case scenario antenna to model the site.

Isotropic Antenna – An antenna that is completely non-directional. In other words, an antenna that radiates energy equally in all directions.



Maximum Measurement – This measurement represents the single largest measurement recorded when performing a spatial average measurement.

Maximum Permissible Exposure (MPE) – The rms and peak electric and magnetic field strength, their squares, or the plane-wave equivalent power densities associated with these fields to which a person may be exposed without harmful effect and with acceptable safety factor.

Occupational/Controlled Environment – Defined by the FCC as an area where RF exposure may occur to persons who are **aware** of the potential for exposure as a condition of employment or specific activity and can exercise control over their exposure.

OET Bulletin 65 – Technical guideline developed by the FCC's Office of Engineering and Technology to determine the impact of RF exposure on humans. The guideline was published in August 1997.

OSHA (Occupational Safety and Health Administration) – Under the Occupational Safety and Health Act of 1970, employers are responsible for providing a safe and healthy workplace for their employees. OSHA's role is to promote the safety and health of America's working men and women by setting and enforcing standards; providing training, outreach and education; establishing partnerships; and encouraging continual process improvement in workplace safety and health. For more information, visit www.osha.gov.

Radio Frequency Exposure or Electromagnetic Fields – Electromagnetic waves that are propagated from antennas through space.

Spatial Average Measurement – A technique used to average a minimum of ten (10) measurements taken in a ten (10) second interval from zero (0) to six (6) feet. This measurement is intended to model the average energy a 6-foot tall human body will absorb while present in an electromagnetic field of energy.

Transmitter Power Output (TPO) – The radio frequency output power of a transmitter's final radio frequency stage as measured at the output terminal while connected to a load.

Appendix C – Rules & Regulations

Explanation of Applicable Rules and Regulations

The FCC has set forth guidelines in OET Bulletin 65 for human exposure to radio frequency electromagnetic fields. Specific regulations regarding this topic are listed in Part 1, Subpart I, of Title 47 in the Code of Federal Regulations. Currently, there are two different levels of MPE - General Public MPE and Occupational MPE. An individual classified as Occupational can be defined as an individual who has received appropriate RF training and meets the conditions outlined below. General Public is defined as anyone who does not meet the conditions of being Occupational. FCC and OSHA Rules and Regulations define compliance in terms of total exposure to total RF energy, regardless of location of or proximity to the sources of energy.

It is the responsibility of all licensees to ensure these guidelines are maintained at all times. It is the ongoing responsibility of all licensees composing the site to maintain ongoing compliance with FCC rules and regulations. Individual licensees that contribute less than 5% MPE to any total area out of compliance are not responsible for corrective actions.

OSHA has adopted and enforces the FCC's exposure guidelines. A building owner or site manager can use this report as part of an overall RF Health and Safety Policy. It is important for building owners/site managers to identify areas in excess of the General Population MPE and ensure that only persons qualified as Occupational are granted access to those areas.

Occupational Environment Explained

The FCC definition of Occupational exposure limits apply to persons who:

- are exposed to RF energy as a consequence of their employment;
- have been made aware of the possibility of exposure; and
- can exercise control over their exposure.

OSHA guidelines go further to state that persons must complete RF Safety Awareness training and must be trained in the use of appropriate personal protective equipment.

In order to consider this site an Occupational Environment, the site must be controlled to prevent access by any individuals classified as the General Public. Compliance is also maintained when any non-occupational individuals (the General Public) are prevented from accessing areas indicated as Red or Yellow in the attached RF exposure diagram. In addition, a person must be aware of the RF environment into which they are entering. This can be accomplished by an RF Safety Awareness class, and by appropriate written documentation such as this Site Compliance Report.

All Verizon Wireless employees who require access to this site must complete RF Safety Awareness training and must be trained in the use of appropriate personal protective equipment.

Appendix D – General Safety Recommendations

The following are *general recommendations* appropriate for any site with accessible areas in excess of 100% General Public MPE. These recommendations are not specific to this site. These are safety recommendations appropriate for typical site management, building management, and other tenant operations.

1. All individuals needing access to the main site (or the area indicated to be in excess of General Public MPE) should wear a personal protective monitor (PPM), successfully complete proper RF Safety Awareness training, and have and be trained in the use of appropriate personal protective equipment.
2. All individuals needing access to the main site should be instructed to read and obey all posted placards and signs.
3. The site should be routinely inspected and this or similar report updated with the addition of any antennas or upon any changes to the RF environment including:
 - adding new antennas that may have been located on the site
 - removing of any existing antennas
 - changes in the radiating power or number of RF emitters
4. Post the appropriate **NOTICE**, **CAUTION**, or **WARNING** sign at the main site access point(s) and other locations as required. Note: Please refer to RF Exposure Diagrams in Section 3.1 to inform everyone who has access to this site that beyond posted signs there may be levels in excess of the limits prescribed by the FCC. In addition to RF Advisory Signage, a RF Guideline Signage is recommended to be posted at the main site access point(s). The signs below are examples of signs meeting FCC guidelines.



5. Ensure that the site door remains locked (or appropriately controlled) to deny access to the general public if deemed as policy by the building/site owner.
6. For a General Public environment the five color levels identified in this analysis can be interpreted in the following manner:
 - Gray represents areas predicted to be at 5% or less of the General Public MPE limits. *The General Public can access these areas with no restrictions.*

- Green represents areas predicted to be between 5% and 100% of the General Public MPE limits. *The General Public can access these areas with no restrictions.*
- Blue represents areas predicted to be between 100% and 500% of the General Public MPE limits. *The General Public should be restricted from accessing these areas.*
- Yellow represents areas predicted to be between 500% and 5000% of the General Public MPE limits. *The General Public should be restricted from accessing these areas.*
- Red represents areas predicted to be greater than 5000% of the General Public MPE limits. *The General Public should be restricted from accessing these areas.*

7. For an Occupational environment the five color levels identified in this analysis can be interpreted in the following manner:

- Gray represents areas predicted to be at 1% or less of the Occupational MPE limits. *Workers can access these areas with no restrictions.*
- Green represents areas predicted to be between 1% and 20% of the Occupational MPE limits. *Workers can access these areas with no restrictions.*
- Blue represents areas predicted to be between 20% and 100% of the Occupational MPE limits. *Workers can access these areas assuming they have basic understanding of EME awareness and RF safety procedures and understand how to limit their exposure.*
- Yellow represents areas predicted to be between 100% and 1000% of the Occupational MPE limits. *Workers can access these areas assuming they have basic understanding of EME awareness and RF safety procedures and understand how to limit their exposure. Transmitter power reduction and/or time-averaging may be required.*
- Red represents areas predicted to be greater than 1000% of the Occupational MPE limits. *These areas are not safe for workers to be in for prolonged periods of time. Special procedures must be adhered to, such as lockout/tagout or transmitter power reduction, to minimize worker exposure to EME.*

8. Use of a Personal Protective Monitor (PPM): When working around antennas, Sitesafe strongly recommends the use of a PPM. Wearing a PPM will properly forewarn the individual prior to entering an RF exposure area.

Keep a copy of this report available for all persons who must access the site. They should read this report and be aware of the potential hazards with regards to RF and MPE limits.

Additional Information

Additional RF information is available at the following sites:

<https://www.fcc.gov/general/radio-frequency-safety-0>

<https://www.fcc.gov/engineering-technology/electromagnetic-compatibility-division/radio-frequency-safety/faq/rf-safety>

OSHA has additional information available at:

<https://www.osha.gov/SLTC/radiofrequencyradiation/index.html>

Appendix E – Regulatory Basis

FCC Rules and Regulations

In 1996, the Federal Communications Commission (FCC) adopted regulations for evaluating the effects of RF exposure in 47 CFR § 1.1307 and 1.1310. The guideline from the FCC Office of Engineering and Technology is Bulletin 65 (“OET Bulletin 65”), *Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields*, Edition 97-01, published August 1997. Since 1996 the FCC periodically reviews these rules and regulations as per their congressional mandate.

FCC regulations define two separate tiers of exposure limits: Occupational or “Controlled environment” and General Public or “Uncontrolled environment”. The General Public limits are generally five times more conservative or restrictive than the Occupational limits. The General Public limits apply to accessible areas where workers or the general public may be exposed to Radio Frequency (RF) electromagnetic fields.

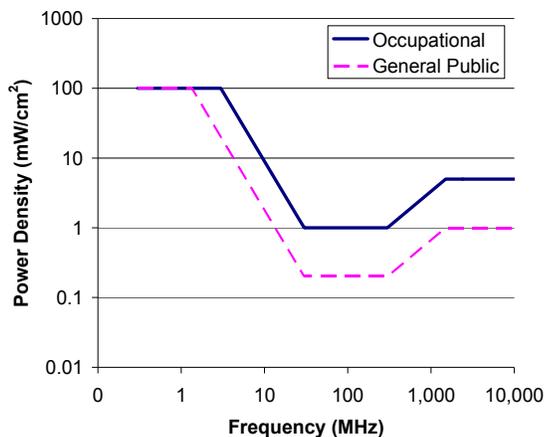
Occupational or Controlled limits apply in situations in which persons are exposed as a consequence of their employment and where those persons exposed have been made fully aware of the potential for exposure and can exercise control over their exposure.

An area is considered a Controlled environment when access is limited to these aware personnel. Typical criteria are restricted access (i.e. locked or alarmed doors, barriers, etc.) to the areas where antennas are located coupled with proper RF hazard signage. A site with Controlled environments is evaluated with Occupational limits.

All other areas are considered Uncontrolled environments. If a site has no access controls or no RF hazard signage it is evaluated with General Public limits.

The theoretical modeling of the RF electromagnetic fields has been performed in accordance with OET Bulletin 65. The Maximum Permissible Exposure (MPE) limits utilized in this analysis are outlined in the following diagram:

FCC Limits for Maximum Permissible Exposure (MPE)
Plane-wave Equivalent Power Density



Limits for Occupational/Controlled Exposure (MPE)



Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f ²)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

Limits for General Population/Uncontrolled Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

*Plane-wave equivalent power density

Appendix F – Safety Plan and Procedures

The following items are general safety recommendations that should be administered on a site by site basis as needed by the carrier.

General Maintenance Work: Any maintenance personnel required to work immediately in front of antennas and / or in areas indicated as above 100% of the Occupational MPE limits should coordinate with the wireless operators to disable transmitters during their work activities.

Training and Qualification Verification: All personnel accessing areas indicated as exceeding the General Population MPE limits should have a basic understanding of EME awareness and RF Safety procedures when working around transmitting antennas. Awareness training increases a worker's understanding to potential RF exposure scenarios. Awareness can be achieved in a number of ways (e.g. videos, formal classroom lecture or internet-based courses).

Physical Access Control: Access restrictions to transmitting antennas locations is the primary element in a site safety plan. Examples of access restrictions are as follows:

- Locked door or gate
- Alarmed door
- Locked ladder access
- Restrictive Barrier at antenna (e.g. Chain link with posted RF Sign)

RF Signage: Everyone should obey all posted signs at all times. RF signs play an important role in properly warning a worker prior to entering into a potential RF Exposure area.

Assume all antennas are active: Due to the nature of telecommunications transmissions, an antenna transmits intermittently. Always assume an antenna is transmitting. Never stop in front of an antenna. If you have to pass by an antenna, move through as quickly and safely as possible thereby reducing any exposure to a minimum.

Site RF Exposure Diagram(s): Section 3 of this report contains RF Diagram(s) that outline various theoretical Maximum Permissible Exposure (MPE) areas at the site. The modeling is a worst-case scenario assuming a duty cycle of 100% for each transmitting antenna at full power. This analysis is based on one of two access control criteria: General Public criteria means the access to the site is uncontrolled and anyone can gain access. Occupational criteria means the access is restricted and only properly trained individuals can gain access to the antenna locations.

RADIO FREQUENCY ELECTROMAGNETIC FIELDS EXPOSURE REPORT

POST-Activation

Prepared for Verizon

Site Name: Potrero West
Site ID: 123825
Site Type: Monopole



Located at:

1435 San Bruno Ave
San Francisco, CA 94110
Latitude: 37.751039 / Longitude: -122.403582

Report Date: 8/15/2021
Report By: James McDaniel

Based on FCC Rules and Regulations, Verizon is compliant.

1.0 EXECUTIVE SUMMARY

Dtech Communications, LLC (“Dtech”) has been retained by Verizon to determine whether its wireless communications facility complies with the Federal Communications Commission (“FCC”) Radio Frequency (“RF”) Safety Guidelines in connection to the City and County of San Francisco’s requirement for Periodic Safety Monitoring. This report contains an on-site, measurement analysis of the Electromagnetic Fields (“EMF”) exposure resulting from the facility and nearby sources.

1.1 Conclusion

Based on the following results, analysis and recommendation(s), it is the undersigned’s professional opinion that Verizon’s site including contributions from existing carriers is compliant with the FCC’s RF Safety Guidelines.

2.0 SAN FRANCISCO WTS CHECKLIST

The San Francisco Department of Public Health set forth the following required information checklist. This information was established in the San Francisco Planning Department Wireless Telecommunication Services Facility Siting Guidelines and is required to demonstrate compliance with FCC’s RF Safety Guidelines.

2.1 Identify the three-dimensional perimeter closest to the facility at which the FCC standards to RF emissions in uncontrolled area are satisfied.

The three-dimensional perimeter did not extend into any uncontrolled areas based on measurements in publicly accessible areas on the ground and nearest adjacent building (see figure 2).

2.2 Document testing that demonstrates that the facility will not cause potential exposure to RF emissions that exceed adopted FCC emission standards for human exposure in uncontrolled areas.

Measurements were conducted in publicly accessible areas in the vicinity of the facility. In addition, measurements were conducted at antenna height and at the nearest adjacent building, where possible (see figure 2).

2.3 Compare test results for each test point with applicable FCC standards.

Please refer to figure 2 where test results are compared to FCC’s General Population MPE (Maximum Permissible Exposure) Limits.

2.4 Prepared by certified engineer or other technical expert approved by the Department. Provide information on calibration of test equipment and is traceable to the National Bureau of Standards.

This report has been prepared by or under the direction of the following Registered Professional Engineer: Darang Tech, holding California registration number 16000. I have reviewed this report and believe it to be both true and accurate to the best of my knowledge.



The Narda meter, model NBM-520 with EA 5091 Probe was used (Serial Nos. B-0200 and 01024, respectively). The meter and probe were last calibrated on 2/07/2020 by the manufacturer and were under current recommended calibration interval of 24 months. This device is designed to measure frequencies between 300kHz and 50Ghz, well within the major wireless operators' frequency ranges. Therefore, the measured level is a cumulative RF energy resulting from all transmitters within the frequency ranges of the probe. The probe itself is frequency shaped and can automatically weigh each field contribution based on frequency.

2.5 Set forth the testing and measurements undertaken pursuant to condition 8 that the facility be operated in such a manner so as not to contribute to ambient RF/EMF standards.

Field measurements were conducted during normal business hours at the subject site on 7/28/21 by James McDaniel, qualified Dtech personnel. Weather conditions can be best described as sunny, mild breeze. Measurements taken on the ground, pursuant to condition 8, are well below the General Population MPE limits and can be considered ambient levels.

2.6 Provide documentation that controls, stipulated in the project application to comply with FCC regulations, are installed.

The antenna(s) are mounted on a tall pole and therefore not accessible by the general public. It is presumed that Verizon employees, contractors and city personnel are aware of the transmitting antennas and will take appropriate precautions when working near them. There are RF advisory sign(s) already posted at path(s) to and/or near the antennas to help establish awareness for exposure (see site photographs and figure 1).

2.7 Provide the actual measurements at antenna height (refer to pre-installation EME report for distance):

Antenna Level - 4.3 % GP (0.021 mW/cm^2), see figure 2
Approximately 20-feet Below

2.8 Provide the actual measurements at ground level:

Ground - 0.4% GP (0.002 mW/cm^2), see figure 2

2.9 Provide the actual measurements at the nearest building:

Nearest Building - 0.6 % GP (0.003 mW/cm^2), see figure 2
Approximately 45-feet North-West

2.10 Submit DPH approval to DPW, PUC, MTA, or Port of SF.

Submitted to:

San Francisco Department of Public Health

1390 Market Street, Suite 210

San Francisco, CA 94102

Attn: Mr. Arthur-Sam Duque, REHS

Senior Environmental Health Inspector, Radio Frequency Program

Email: Arthur.Duque@sfdph.org

Appendix A: Site Photographs



General site view



Caution Sign (Base of Pole)



Verizon & Sprint Antennas



Verizon & Sprint Antennas



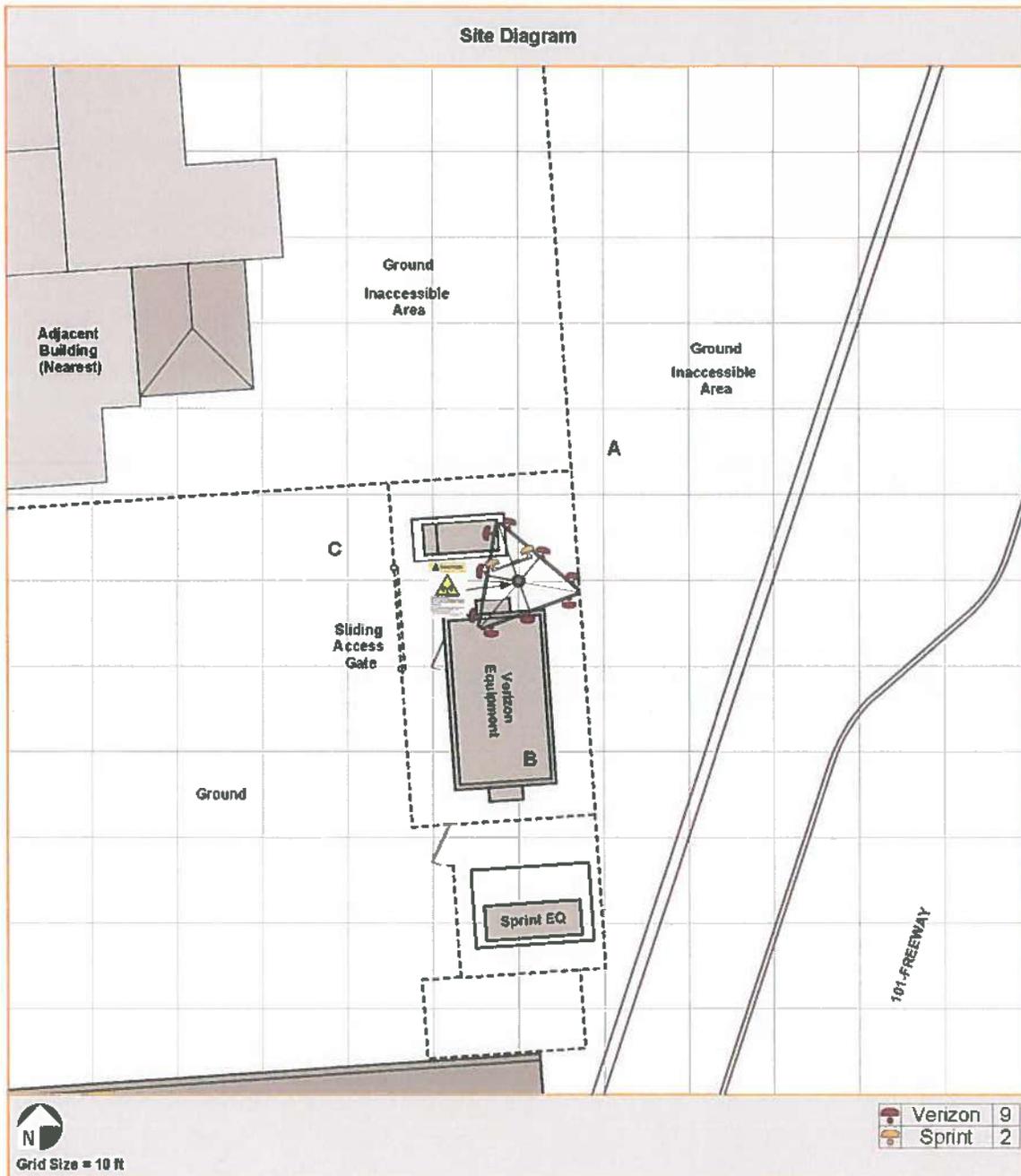
Verizon & Sprint Antennas



Verizon Equipment

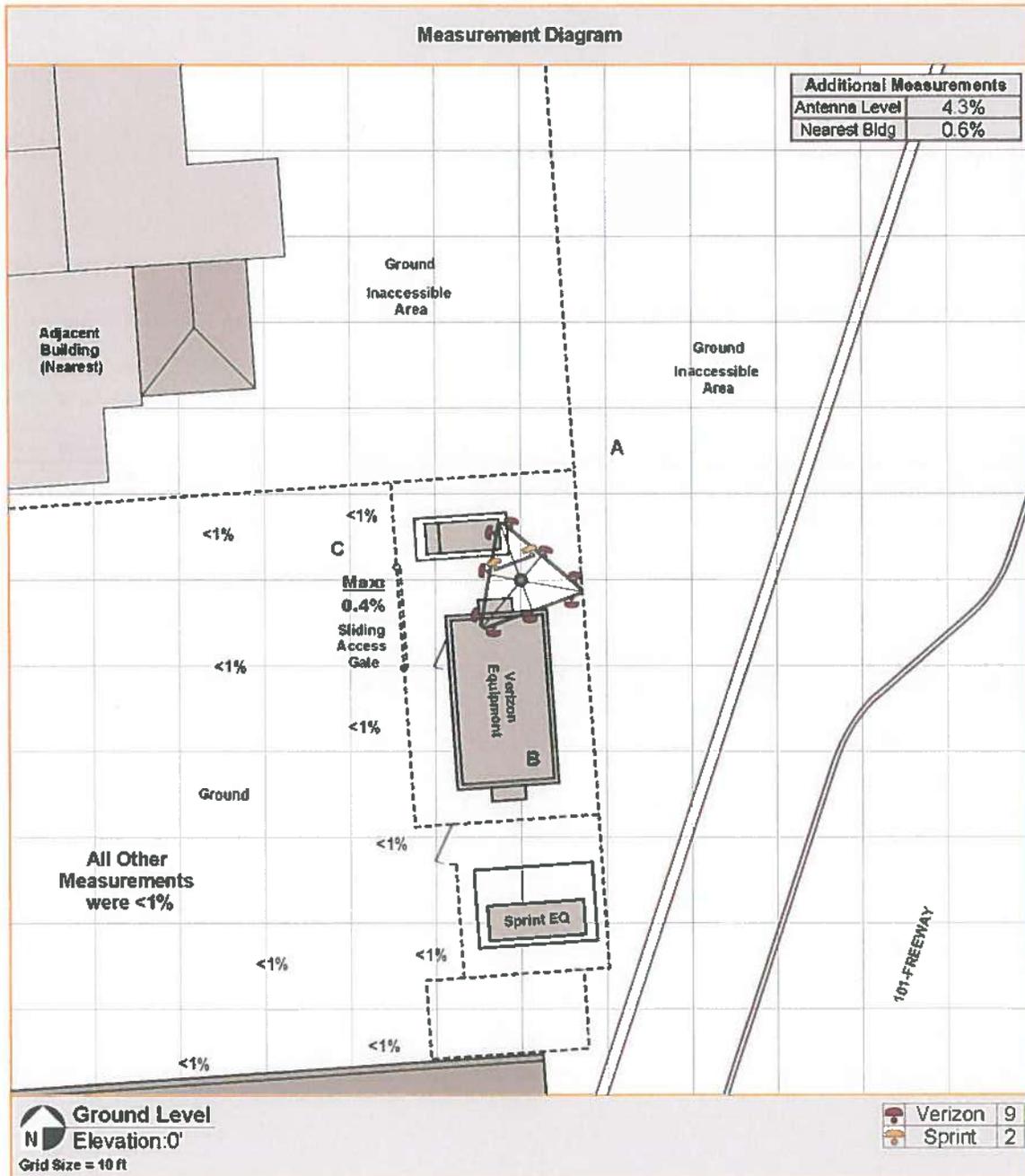
Appendix B: Existing Conditions

Figure 1: Site Diagram - Plan (bird's eye) view map of signs/barriers currently existing on site.



Appendix C: Emission Measurements

Figure 2: Plan (bird's eye) view map of results compared to FCC's General Population MPE (Maximum Permissible Exposure) Limits. A result higher than 100% exceeds the FCC's General Population MPE Limits.



Permit Details Report

Report Date: 11/17/2022 5:58:22 PM

Application Number: 20220288869
Form Number: 8

Address(es): 4279 / 029 / 0 1431^{SAN} BRUNO AV

Description: VERIZON: REMOVE 9 ANTENNA, ADD 12 ANTENNAS. REMOVE 12 RADIO UNITS, ADD 9 RADIO UNITS. INSTALL MOUNT MODIFICATIONS FOR ANTENNAS.

Cost: \$33,500.00

Occupancy Code: B

Building Use: 82 - ANTENNA

Disposition / Stage:

Action Date	Stage	Comments
2/28/2022	TRIAGE	
2/28/2022	FILING	
2/28/2022	FILED	
9/28/2022	APPROVED	
9/28/2022	ISSUED	
10/14/2022	SUSPEND	Per BOA Appeal No. 22-071

Contact Details:

Contractor Details:

License Number: 1058024
Name: RAVIKANTH GANAPAVARAPU
Company Name: RAVIG INC DBA SALIENT GLOBAL TECHNOLOGI
Address: 510 GARCIA AV * PITTSBURG CA 94565-0000
Phone:

Addenda Details:

Description:

Step	Station	Arrive	Start	In Hold	Out Hold	Finish	Checked By	Hold Description
1	BID-INSP	2/28/22	2/28/22			2/28/22	SAUNDERS PHILIP	
2	INTAKE	2/28/22	2/28/22			2/28/22	SHAWL HAREGGEWAIN	
3	CP-ZOC	3/31/22	3/31/22			3/31/22	OROPEZA EDGAR	Approved site mod - existing macro site tower approved for said work - REMOVE 9 ANTENNA, ADD 12 ANTENNAS. REMOVE 12 RADIO UNITS, ADD 9 RADIO UNITS. INSTALL MOUNT MODIFICATIONS FOR ANTENNAS.
4	PAD-STR	5/25/22	5/25/22			5/25/22	RALLS MATTHEW	otc approved 5/25/22. Recinded approval per Planning or Health comments email from Stephanie - 8/15/22.
5	BLDG	9/28/22	9/28/22			9/28/22	JONES DAVID	+90 DAYS RECHECK
6	MECH	6/13/22	6/13/22			8/22/22	ORTEGA REYNALDO	re-approved OTC, plans back to customer for HEALTH review Approved OTC, plans back to customer for SFFD review
7	MECH-E	9/28/22	9/28/22			9/28/22	JACOBO MARCO	2022-09-28 - marco.jacobo@sfgov.org: Acceptance issued OTC for Electrical Title 24 only. The Electrical Engineer of Record shall ensure full coordination with other disciplines. All electrical work shall be subject to verification and final acceptance by SFDBI Electrical Inspection Division, and shall comply with the 2019 San Francisco Electrical Code and 2019 California Energy Code. Plans returned to customer.
8	SFFD	8/2/22	8/2/22			8/2/22	ZIEGLER ERIK	8/2/22 Approved OTC by Ziegler of SFFD. Plans returned to applicant.
9	INTAKE	8/22/22	8/22/22			8/22/22	BUFKA SUSAN	ADDED 3 SHEETS FOR EMF STUDY
10	HEALTH	8/22/22	8/22/22			8/22/22	DUQUE ARTHUR - DPH	Approved OTC.
11	CPB	9/28/22	9/28/22			9/28/22	SONG SUSIE	90-DAY BY DJ

This permit has been issued. For information pertaining to this permit, please call 628-652-3450.

Appointments:

Appointment Date	Appointment AM/PM	Appointment Code	Appointment Type	Description	Time Slots
------------------	-------------------	------------------	------------------	-------------	------------

Inspections:

Activity Date	Inspector	Inspection Description	Inspection Status
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Special Inspections:

Addenda No.	Completed Date	Inspected By	Inspection Code	Description	Remarks
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For information, or to schedule an inspection, call 628-652-3400 between 8:30 am and 3:00 pm.

[Station Code Descriptions and Phone Numbers](#)

[Online Permit and Complaint Tracking](#) home page.

Technical Support for Online Services

If you need help or have a question about this service, please visit our [FAQ](#) area.

For technical issues or error messages email planning.webmaster@sfgov.org. Providing a screenshot, error message, and the action being taken can speed the response or correction greatly.

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**Record 2022-002927PRL:
Project Light (PRL)
Record Status: Closed
Expiration Date: 01/31/2022**

[Record Info](#) ▼

For Documents:

- 1. Select the record of interest ***
- 2. Click Record Info**
- 3. Select Attachments**

* To list project records, click on Record Info and select Related Records.

Documents available online do not represent the full administrative record. To review the complete file for active records, please contact the assigned planner. To review closed records, please request the record via email at CPC-RecordRequest@sfgov.org.

Work Location

1431 SAN BRUNO AVE
, 94110

Record Details

Project Description:

Approved site mod - existing macro site tower approved for said work - REMOVE 9 ANTENNA, ADD 12 ANTENNAS.
REMOVE 12 RADIO UNITS, ADD 9 RADIO UNITS. INSTALL MOUNT MODIFICATIONS FOR ANTENNAS.

More Details

Application Information

PROJECT FEATURES

Other: Yes

Project Features Desc:

Approved site mod - existing macro site tower approved for said work - REMOVE 9 ANTENNA, ADD 12 ANTENNAS. REMOVE 12 RADIO UNITS, ADD 9 RADIO UNITS. INSTALL MOUNT MODIFICATIONS FOR ANTENNAS.

Application Information Table

RELATED BUILDING PERMITS

Application Number:

202202288869

Parcel Information

Parcel Number:

4279029

Lot:

029

Block:

4279

For technical issues or error messages email planning.webmaster@sfgov.org. Providing a screenshot, error message, and the action being taken can speed the response or correction greatly.

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Processing Status

✔ ▼ Project

Assigned to **NA**

Marked as **Case Review Complete** on **03/31/2022** by **Edgar Oropeza**